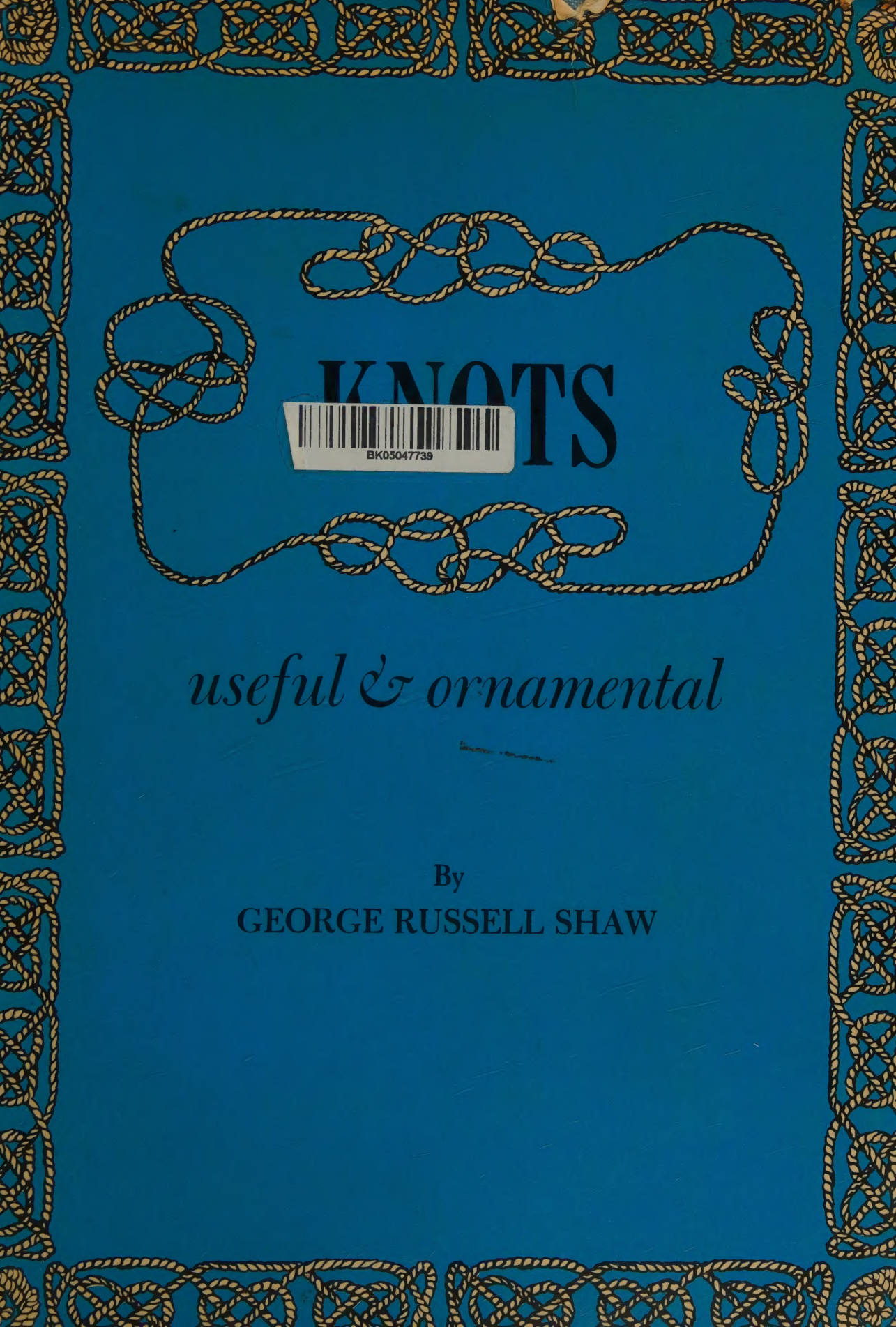
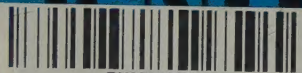




KNOTS



BK05047739

useful & ornamental

By
GEORGE RUSSELL SHAW

KNOTS

useful & ornamental

By

GEORGE RUSSELL SHAW

One of the first tools presaging the dawn of civilization was the intertwining of organic fibers to form what is known today as the knot. In the modern world however, scant credit is given to the little knot—though to the sailor, the cowboy, the gaucho, the mountaineer, and the outdoorsman the knowledge of the knot is essentially timeless and is an indispensable study. For all of man's advanced technology nothing yet has replaced the knot.

The value of the knot however, is not merely practical. The unique and gratifying attitude of this book is that George Russell Shaw has recognized the unlimited potentiality of the knot and has presented in 193 full pages of illustrations not only the knot's usefulness as a basic tool but its beauty as a craft, an ornament and a work of art.

Beginning with a definition of terms, concise step-by-step instructions show you how to make every type of knot from the simple "Clove Hitch" to the elegant and labyrinthian "Octagonal Knot." There are also full descriptions of how to make angular knots, braids, ladders, lassos and nets.

The book is full of surprises—there is everything from tying flies to making belts and buckles; from book covering to Celtic knots; from flower knots to temple ornaments; from macramé to the ancient technique of knotting as developed in Japan.

This is a book for both the hobbyist and the professional—and for all those who are fascinated by the creative endeavor of making infinite variations on one theme.

~~Handwritten text, possibly "The end of the world"~~

THE END

KNOTS

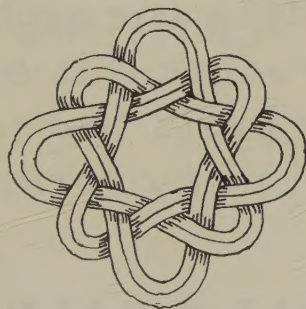
USEFUL AND ORNAMENTAL

KNOTS

USEFUL ^{AND} ORNAMENTAL

BY

GEORGE RUSSELL SHAW



BONANZA BOOKS • NEW YORK

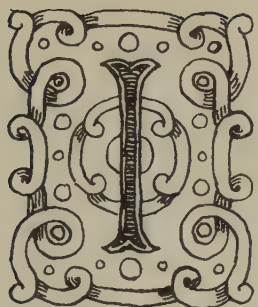
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a b c d e f g h

INSCRIBED
TO
ROBERT GOULD SHAW
BY HIS
BROTHER



IN the United States, the study of knots has moved westward and may be found in the curriculum of western State Colleges. There the AB seaman, the familiar tar of the deep seas, finds a worthy coadjutor in the Mexican Vaquerro, the mounted Cowboy, skilful in the training of horses, in the embellishment of saddlery, very skilful with the rope, bringing with him names of Spanish origin—lasso, cinch, lariat, latigo hondo—now permanently grafted on the English tongue as it is spoken in all the ranches beyond the Mississippi.

In many details incidental to the care and breeding of stock, to the cultivation of land, to the harvest, its storage and transportation, there are occasions for the use of cordage where the knowledge of reliable knots, appropriate for whatever emergency, is an important part of the ranchman's education.

In the first edition, #64 braid of the New Bedford Textile Co. was recommended for practice in tying knots. If the ends when cut, are dipped in paste or rubber cement and are rolled between the fingers, the strands will not unravel and a rigid end will result, very convenient for reeving through eyelets or loops.

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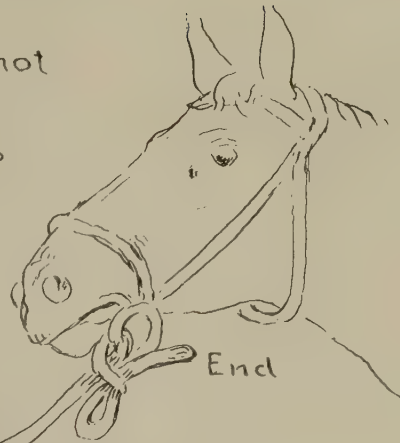
DEFINITIONS

The End of a Line

is the part that ties the Knot
shown thus 
on the drawings

The Standing Part

is the rest of the Line
shown unfinished
on the drawings



A

as at A

Standing Part

The Bight is the part of the line between its ends

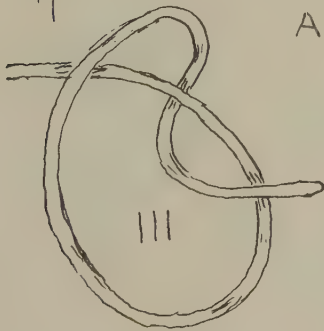
A Bight

is a more or less pronounced
bend

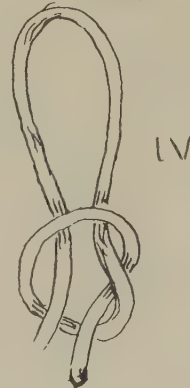
in a line - Figs. II, a or b

II-a

II-b



A knot may be tied
with the End
Fig. III
or
with the Bight
Fig. IV

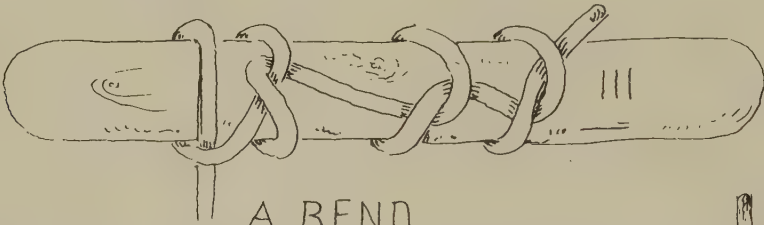
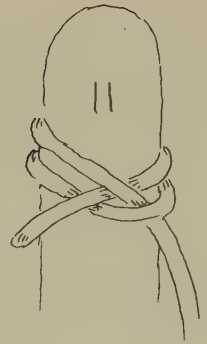
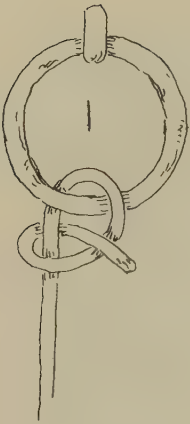


2

A HITCH

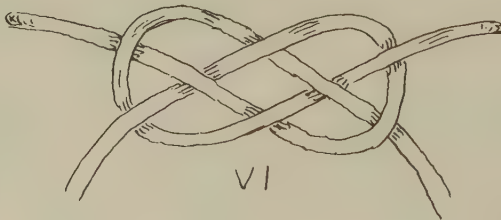
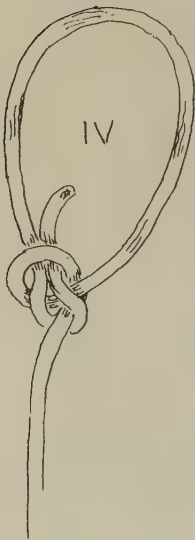
as here understood
is a Knot
tied to a
ring, spar, post, cable
or
other anchorage
not a part of the knot itself

Figs. I, II, III.

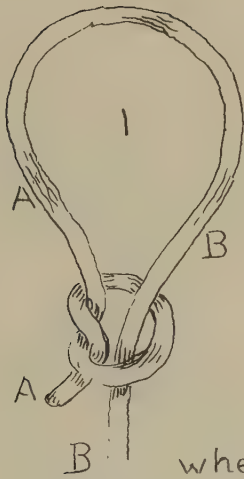


A BEND

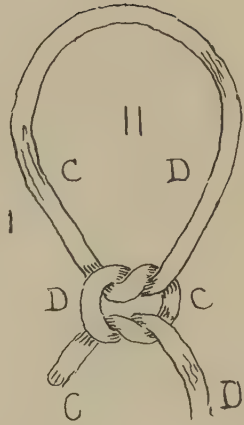
is a Knot uniting
two lines
or two parts of the same line
where
each line or each part
is an integral part of the Knot
Figs IV, V, VI.



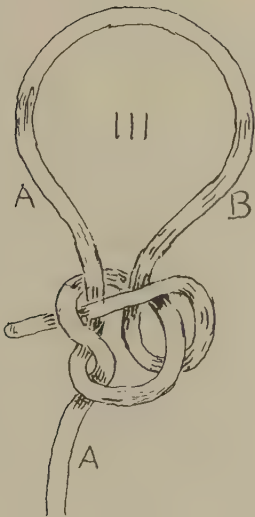
NOOSE and LOOP



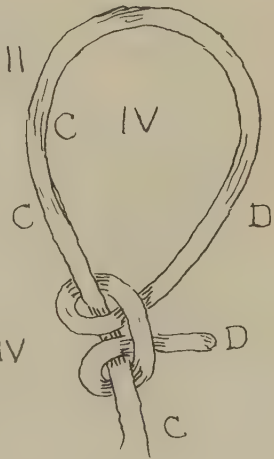
A Noose
is tied with
a Hitch
of one of its parts A-A
around the other B-B,
which remains straight. Fig. I



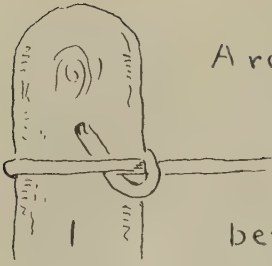
A Loop
is tied with
a Bend
where both parts C & D combine
to form the knot
Fig II



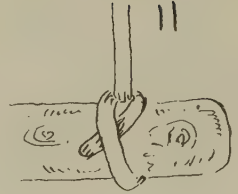
A Noose Fig. I
may become a Loop Fig. III
by tying a Hitch
in the
running part B



A Loop Fig. II
may become a Noose Fig. IV
when one
of its parts C-C-C
can be straightened

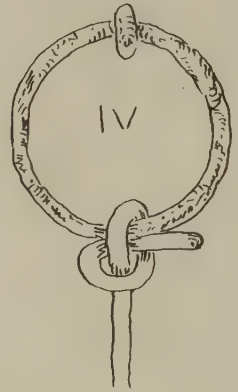
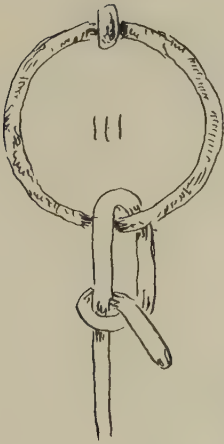
HALF HITCH

Around turn of a line about
a post or spar
One part
of the line
bears or jams upon the other
Figs. I & II

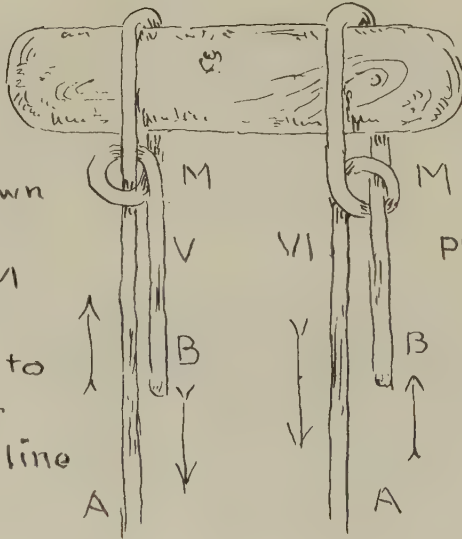


or

A turn
of the end of a line
around the
standing part
Figs III, IV



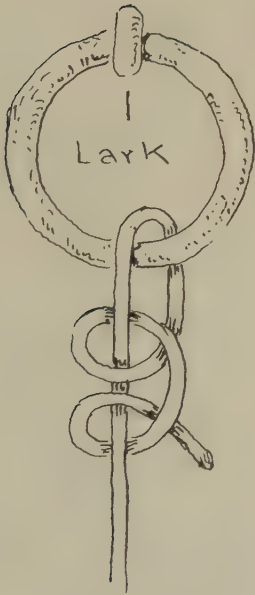
In Fig. V by
pulling B down
and A up
the hitch M
will be
transferred to
the other
part of the line
Fig. VI



In Fig. VI
by
pulling A down
and B up
the hitch M
regains
its original
position

5

TWO HALF HITCHES



It will be seen later
that the knot
of

Fig. I - Lark
is a form of the
Reef Knot

page

19

Fig. II - Clove

is a form of the
Granny

page 32

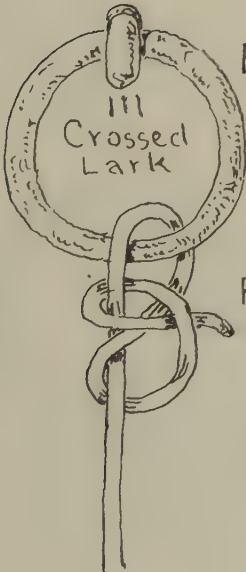
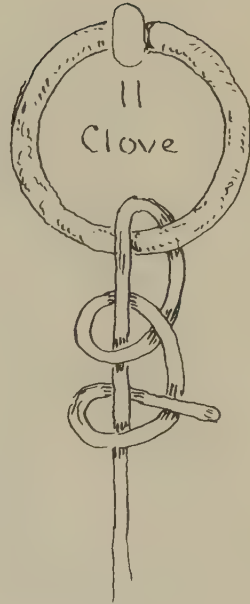


Fig. III - Crossed Lark is
a form of the

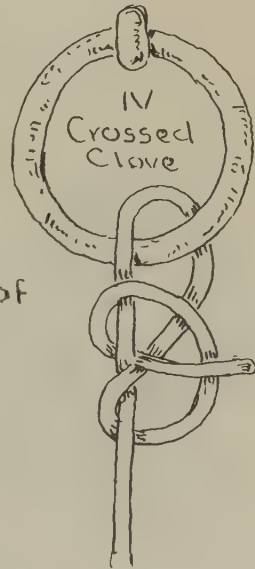
Oblique Square Knot

page 20

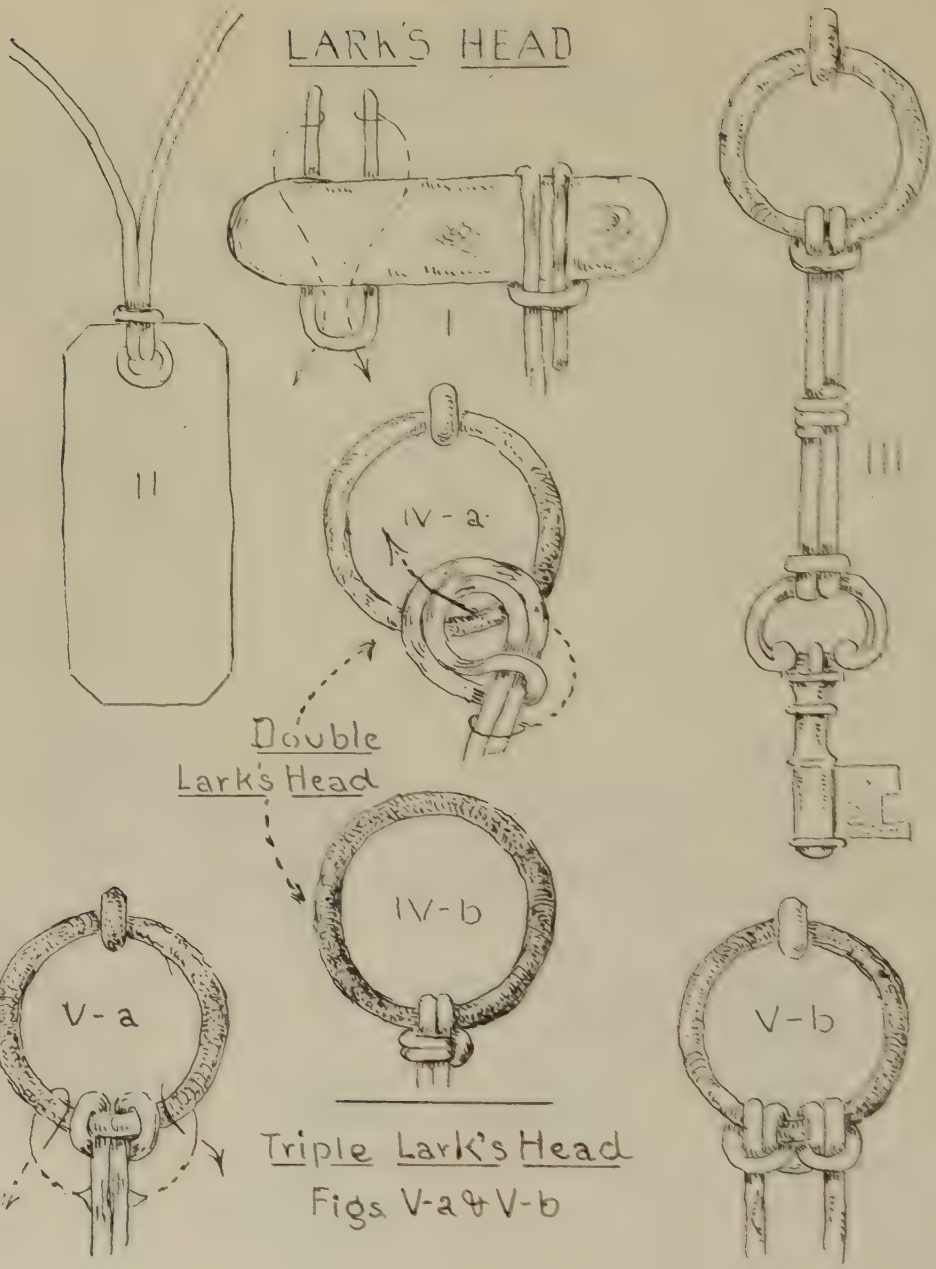
Fig. IV - Crossed Clove, of
the

Oblique Granny

page 33

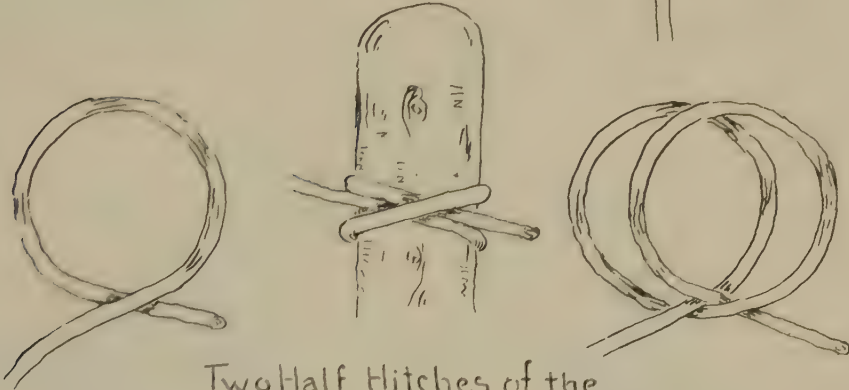
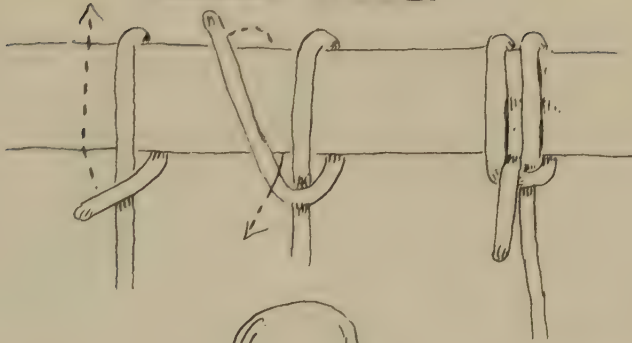


LARK'S HEAD

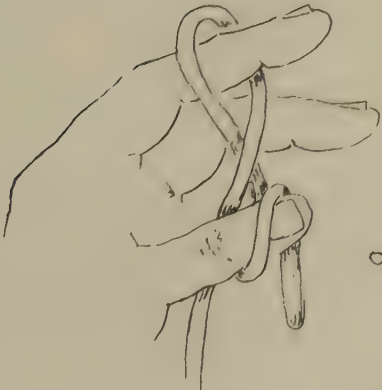


7

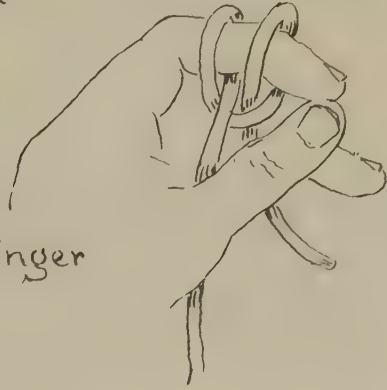
CLOVE HITCH



Two Half Hitches of the
same lay
over
a post

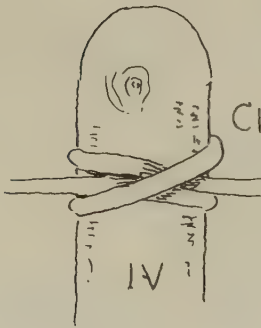
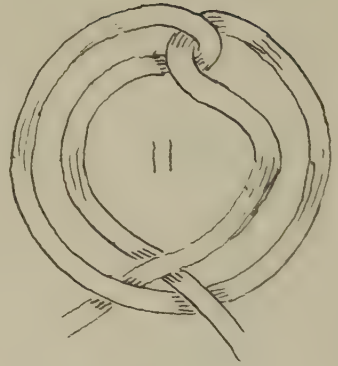
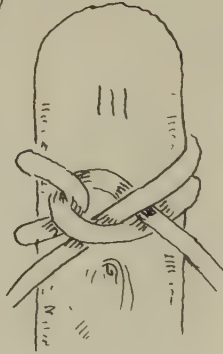
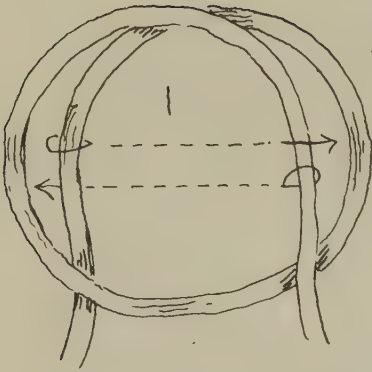


over the finger

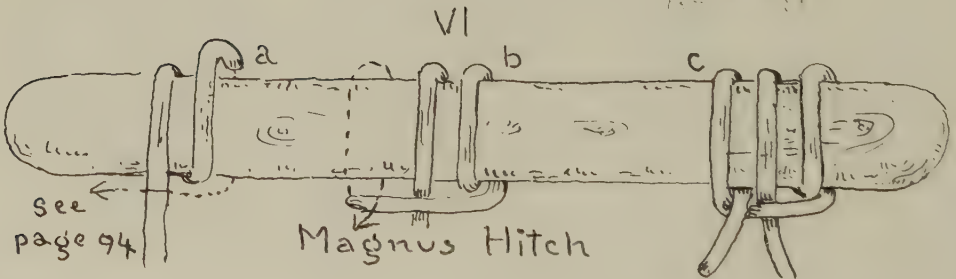
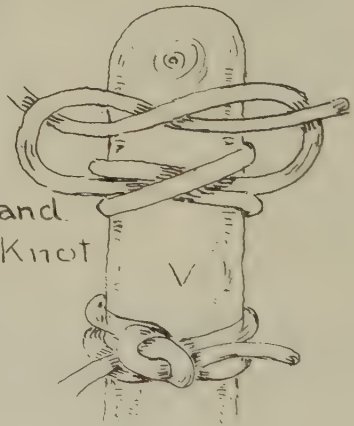


CLOVE HITCH

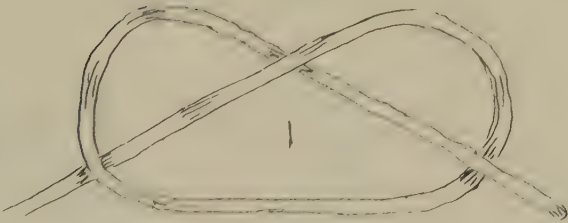
with
Double Loop
Figs. I—III



Clove Hitch
and
Overhand
Knot



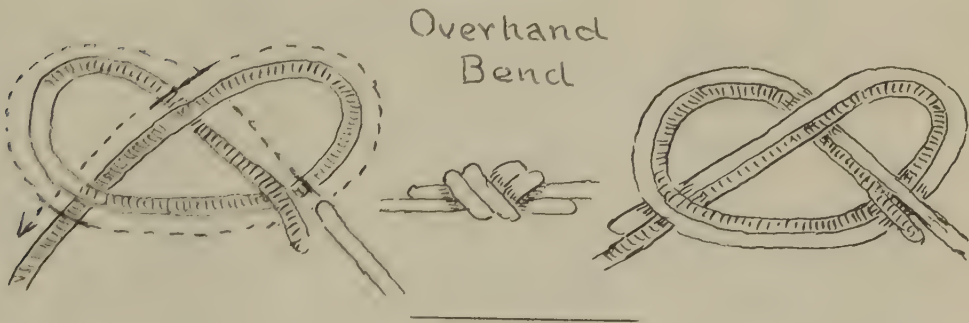
OVERHAND KNOT



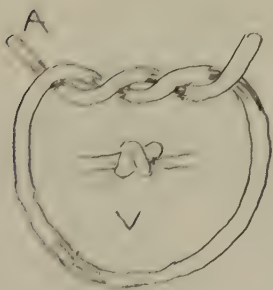
Figs. I, II
Overhand Knot

Fig. III
Overhand Noose

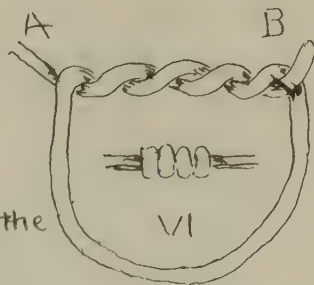
The Knot tied with the bight of the line



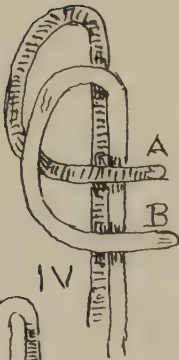
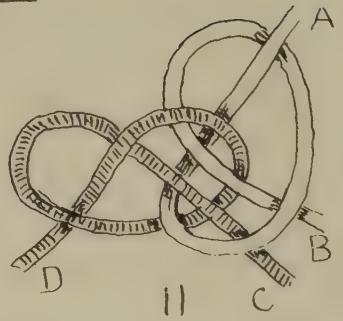
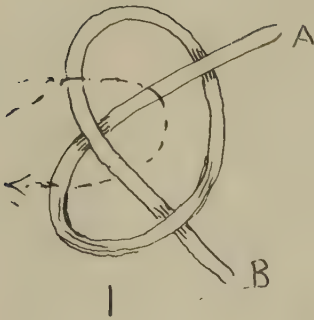
Overhand
Bend



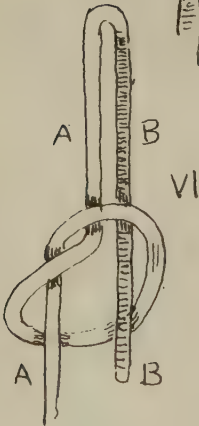
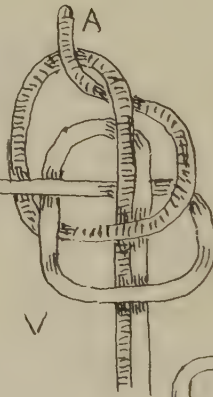
Multiple
Overhand Knots
Pull A & B sharply
Figs. V, VI
Fig. V is also known as the
Blood Knot



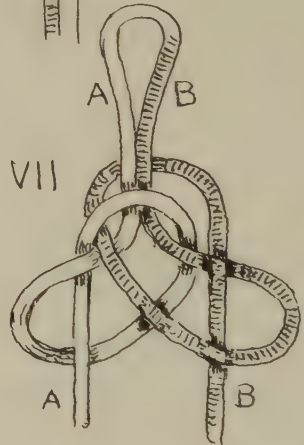
TWIN OVERHAND KNOTS



The same Knot may be tied in this manner

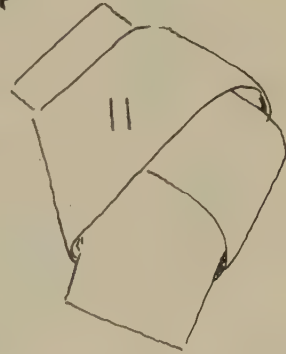
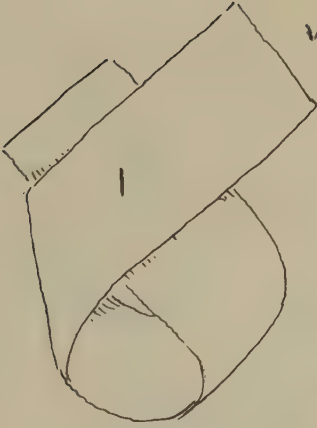


From an Indian Whip



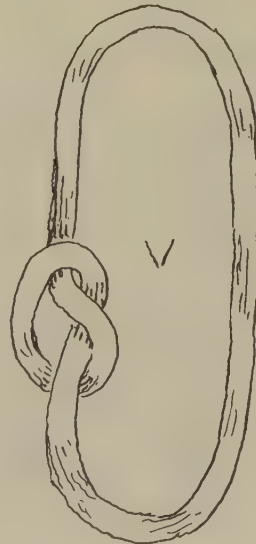
THE OVERHAND KNOT

when tied with a paper
band
takes the form of
a pentagon



Let one end
of a length of tape
be turned over
three times
and then be pasted
onto the
other end, Fig. IV

If the tape is
cut through along
the dotted line
it becomes an endless
Overhand Knot
Fig. V.



12

FIGURE OF EIGHT

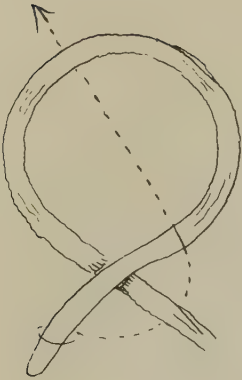


FIGURE OF EIGHT BEND

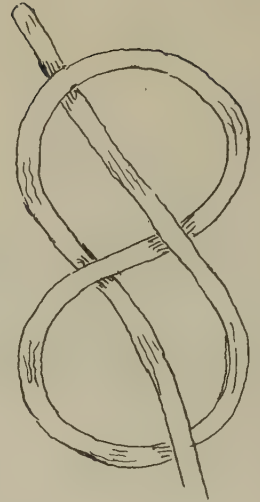
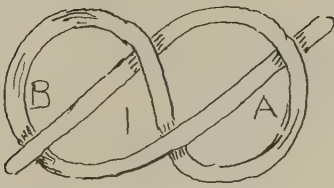


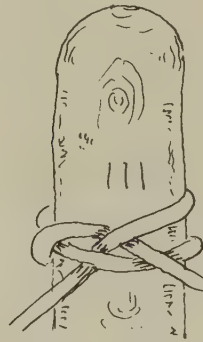
Figure of Eight and the Miller's Knot

See page 106

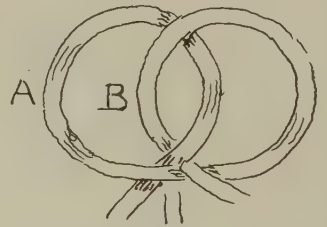
Fig. of 8



Lay A over
onto B
Figs. I, II



Miller's Knot



Throw the two loops
over a post
Fig III

The Overhand Knot

Fig. IV

can also pass
into the
Miller's Knot
by shifting C & D

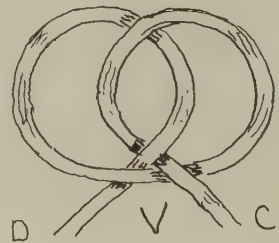
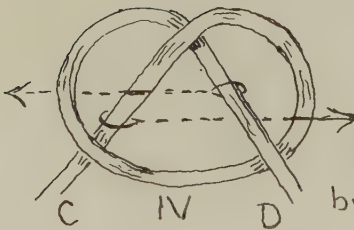
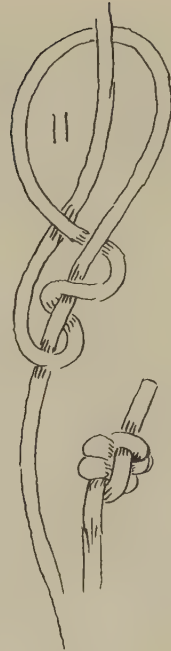


FIGURE OF EIGHT

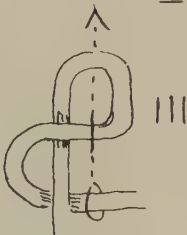


Packer's
Noose

Stevedore
Knot



Single
Figure of Eight



III

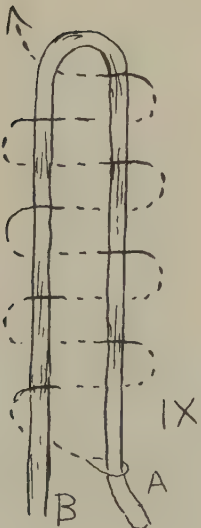


V

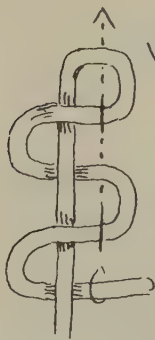


IV

Double Figure of Eight
Figs. VI-VIII



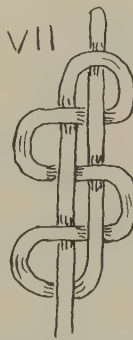
IX



VI



VIII



VII

Multiple
Figure of Eight
Figs. IX, X



X



ANALYSIS of the Bends of the Forms M & N



CENTER



A One line lies on the other

B The two lines interlace



ENDS

Ends
not crossed in
the Bight

1- Ends on same side
of the Bight

2- Ends on different
sides of Bight



Ends
are crossed in
the Bight

3- The Braiding is not
regular

4- The Braiding is
regular

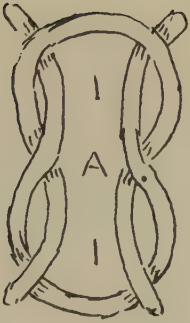


There are 20 possible combinations

1-A-1 1-A-2 1-A-3 1-A-4 2-A-2 2-A-3 2-A-4 3-A-3 3-A-4 4-A-4
1-B-1 1-B-2 1-B-3 1-B-4 2-B-2 2-B-3 2-B-4 3-B-3 3-B-4 4-B-4

15

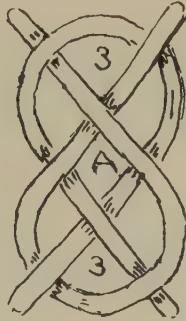
Among the twenty
combinations
there are eight knots



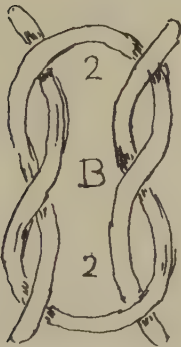
REEF KNOT



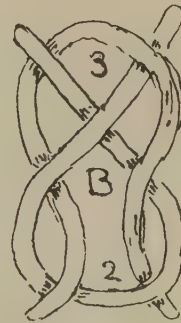
WEAVER'S KNOT



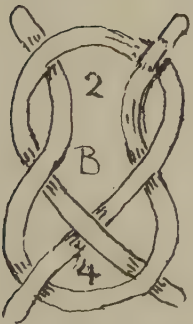
HALF GRANNY



GRANNY



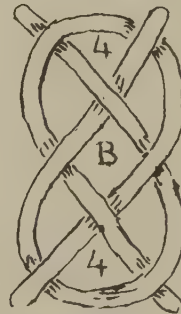
SINGLE CARRICK



HALF CARRICK

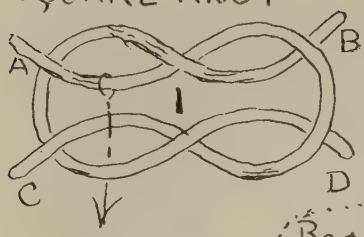


DOUBLE CARRICK (1)

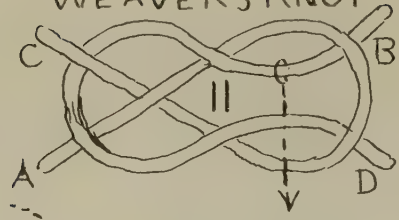


DOUBLE CARRICK (2)

SQUARE KNOT

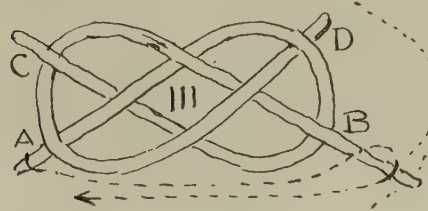


WEAVER'S KNOT

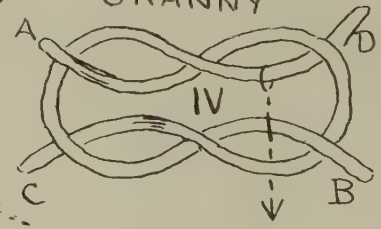


Beginning with the
Square Knot
Fig. I

HALF GRANNY



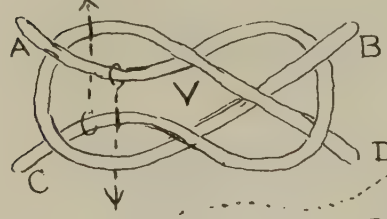
GRANNY



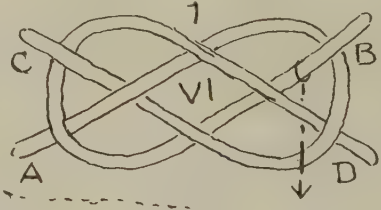
See page 30

and ending with the
Double Carrick
Fig. VIII

SINGLE CARRICK

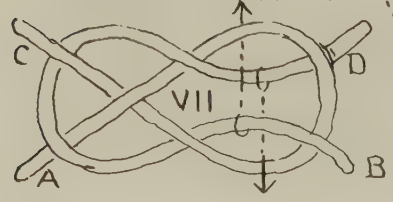


DOUBLE CARRICK



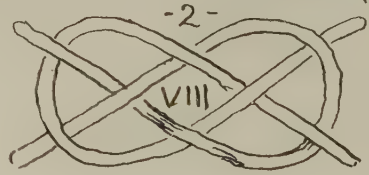
the eight Bends of the previous page
pass, each into the next,
by a slight change

HALF CARRICK

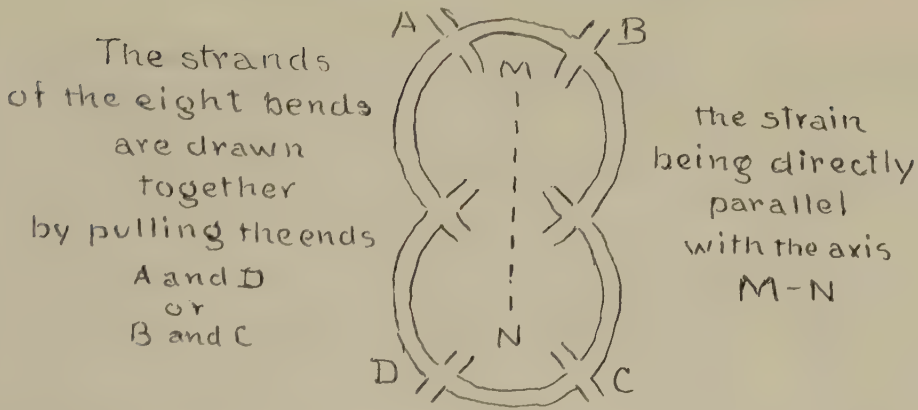


in the
lay of the
strands

DOUBLE CARRICK



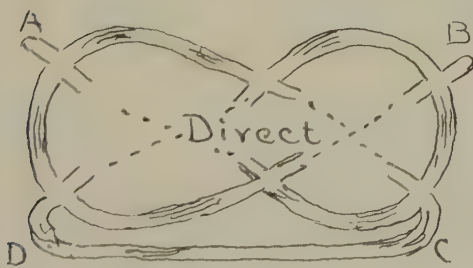
-2-

OBLIQUE BENDS

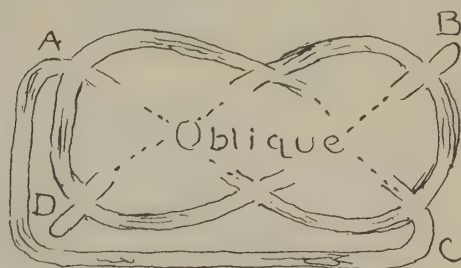
But the strain can be applied to A and C or to B and D in a direction oblique to the axis.

The Oblique Bends will be explained in later pages where each is an intermediate stage in the tying of a Loop peculiar to that Bend alone

The distinction between Direct and Oblique is better presented when the Bends are tied with the ends of a single line



The two ends A & B are on the same side of the knot

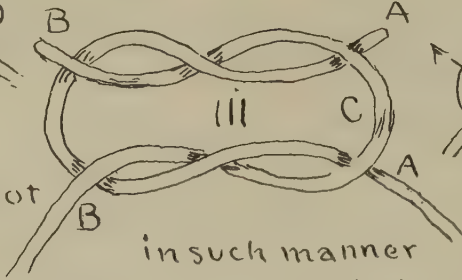


The two ends B & D are on opposite sides of the Knot

SQUARE KNOT or REEF KNOT



Tie an
Overhand Knot



in such manner
that the parts A A
lie on the same side of the
bight C
Fig. III



Tie
another
backwards
Fig. II



IV

Fig. IV is the
Single Bow Knot
tied with
the bight of one end

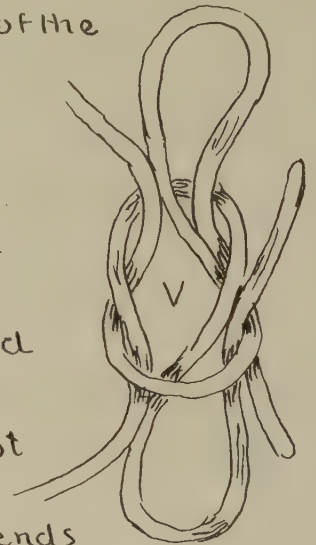


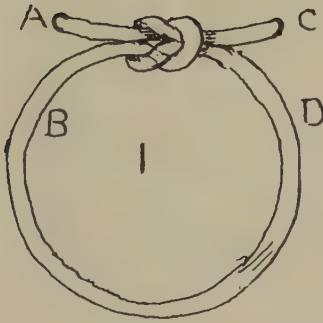
Fig V is the
Double Bow Knot
tied with
the bight of both ends



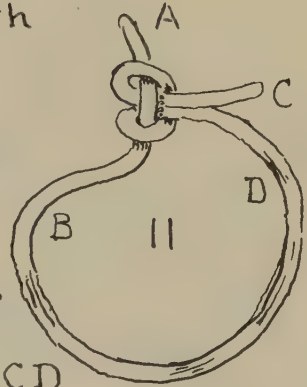
SQUARE KNOT AND LARK'S HEAD

Fig. I

is a Loop tied with
a
Square Knot.



If the part A B
is
straightened
the knot becomes
a Noose



tied by a Lark's Head C D
around

the part A-B, Fig. II

Conversely
A

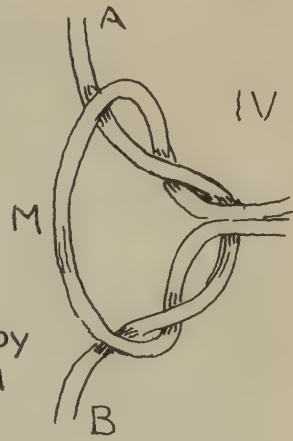
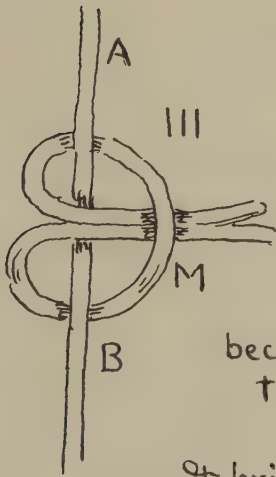
Lark's Head

around

a line A B, Fig III

becomes a Square Knot by
turning the bight M
around A B

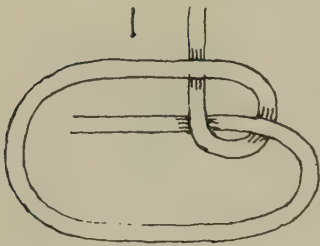
& bringing the ends A & B
together



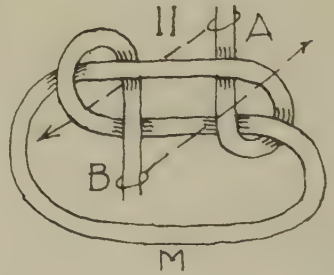
see page 5, Fig I

To untie a Square Knot, straighten one of the 2 strands
Grasp the resulting Lark's Head
and strip it quickly from the straight strand

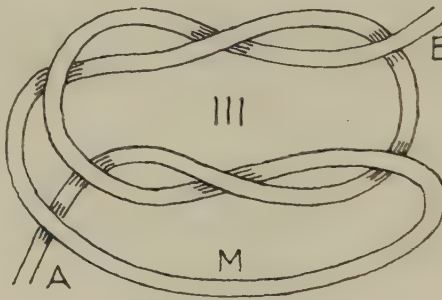
OBLIQUE SQUARE KNOT



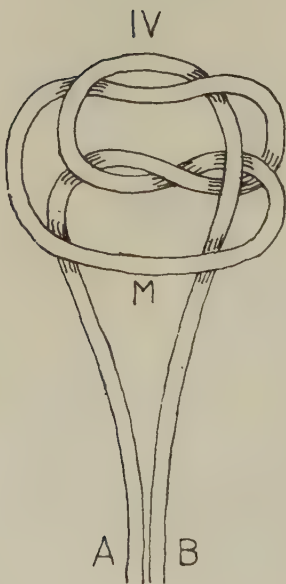
In Fig II pass A
to left under,
and B to right
over the strands



The Oblique
square knot
also known
as the
Thief Knot

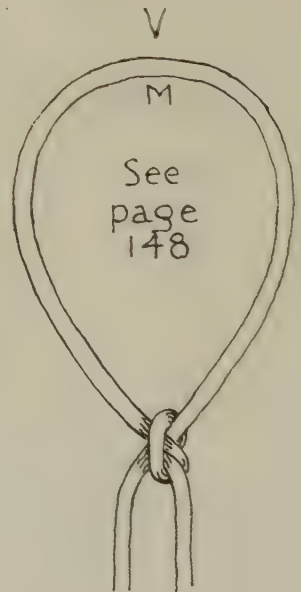


Under strain,
however
slight,
it slips
apart.



See page 5

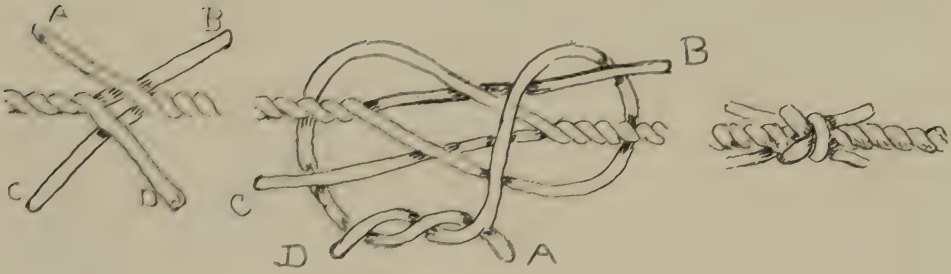
But
in Fig. III
bring the ends
A & B
together, Fig IV.
then with A & B
in one hand
and the part M
in the other hand
the knot becomes
a reliable
Japanese Loop.



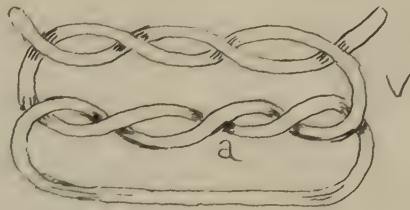
See
page
148

MARLINE - OR ROPE YARN KNOT

Marline is laid with
two strands

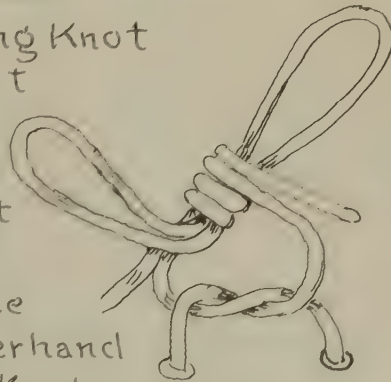
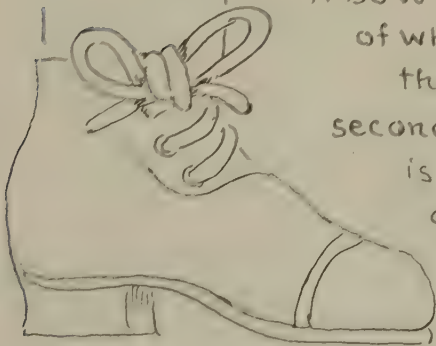


The Surgeons' Knot is a
Square Knot
of which
th first part, Fig. V-a,
is a
double Overhand Knot



The Shoe String Knot

A Bow Knot
of which
the
second part
is a
double
Overhand
Knot



Under several names as
Weaver's Knot - Sheet Bend - Bowline & others, is
a combination of a Loop AB with
a Half Hitch CD

Fig. I

is the Direct form of the knot,
the two ends (both A and C)
being on the same side of the knot

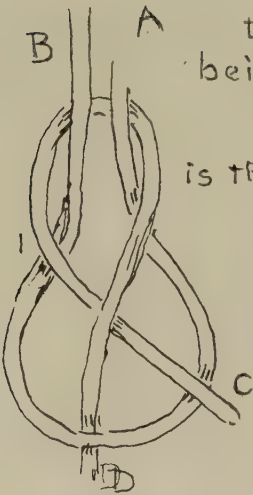


Fig. II

is the Oblique form of the knot,
the two ends A & C being
on opposite sides

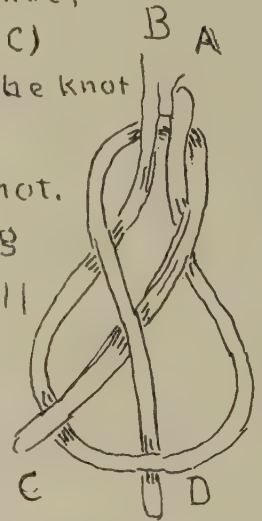


Fig. III

is the Oblique form
tied with one line.

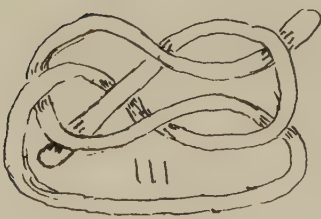
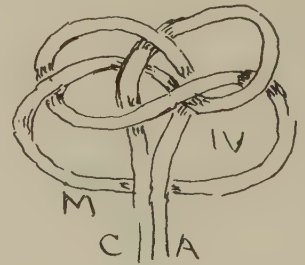


Fig. IV

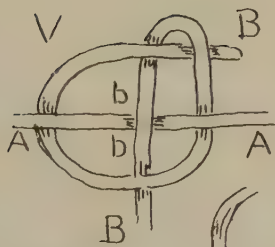
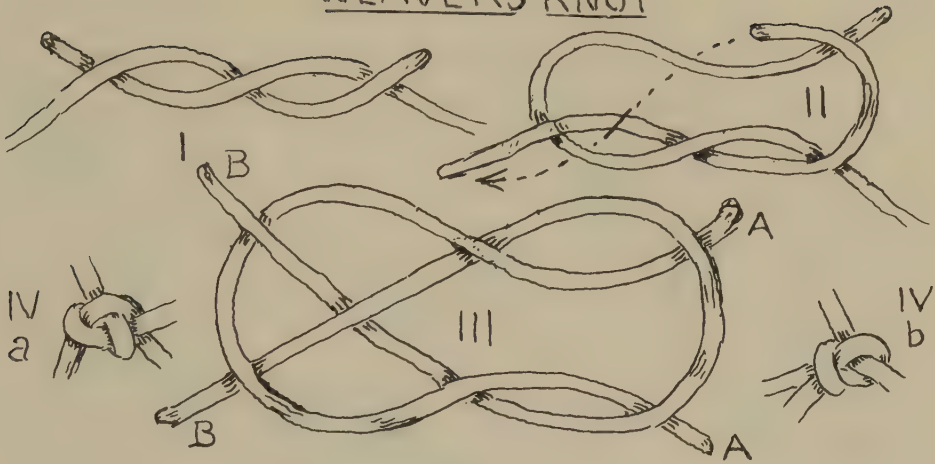
A & C are brought
together.



With
C A in one hand &
M in the other



The Knot
becomes a loop

WEAVER'S KNOTWEAVER'S KNOTand SLIP NOOSE

Straighten the line A A Fig III
to obtain Fig. V (Crabber's Knot, p 27)

With A A pull b b until the knot
becomes a Noose

Fig. VI

Therefore

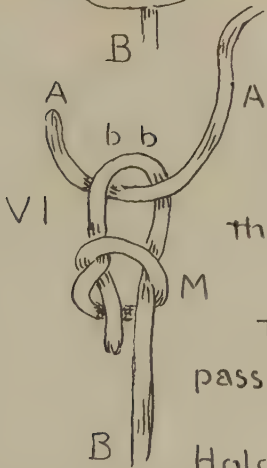
the Weaver's Knot may be tied
as follows

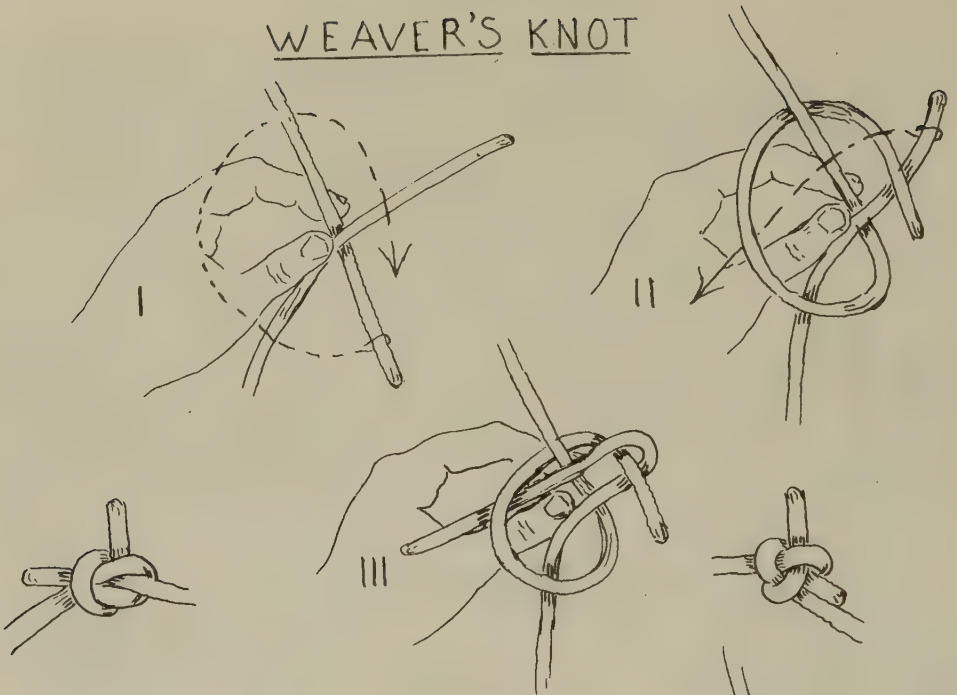
Tie a Noose with one line,
pass the other line through its eye

Fig. VI

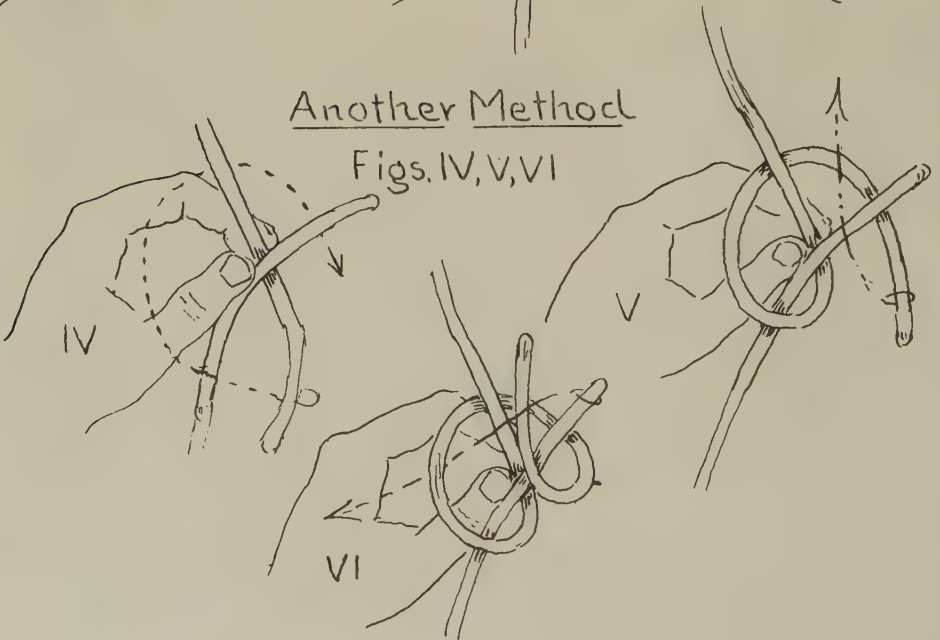
Hold A A together, pull B and slip

the collar, M, up onto the loop formed by A A, Fig. VII



WEAVER'S KNOTAnother Method

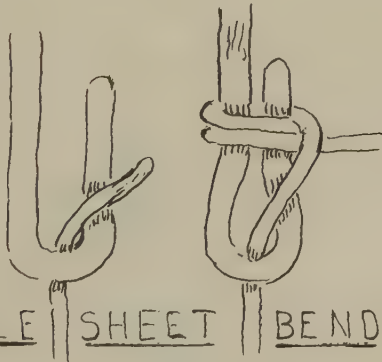
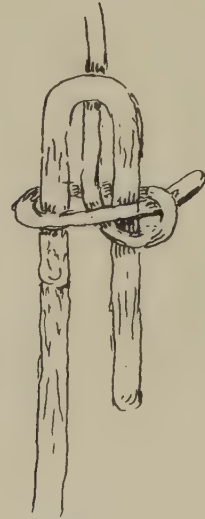
Figs. IV, V, VI



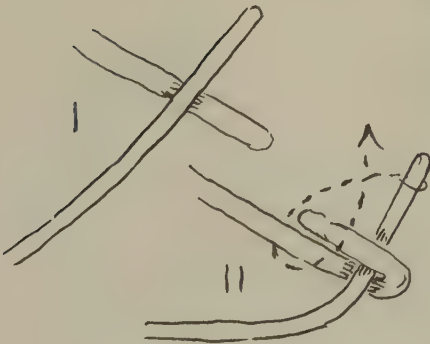
The combination of a Loop with a Half Hitch
Is a reliable Knot
for joining two lines of
unequal size



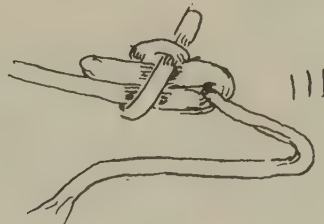
HEAVING LINE
BEND



DOUBLE SHEET BEND

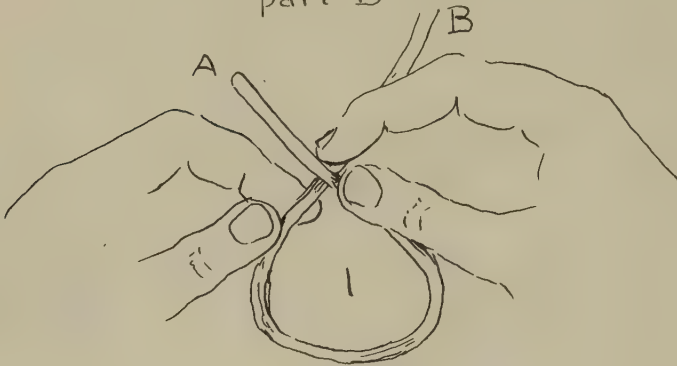


WHIP LASH KNOT

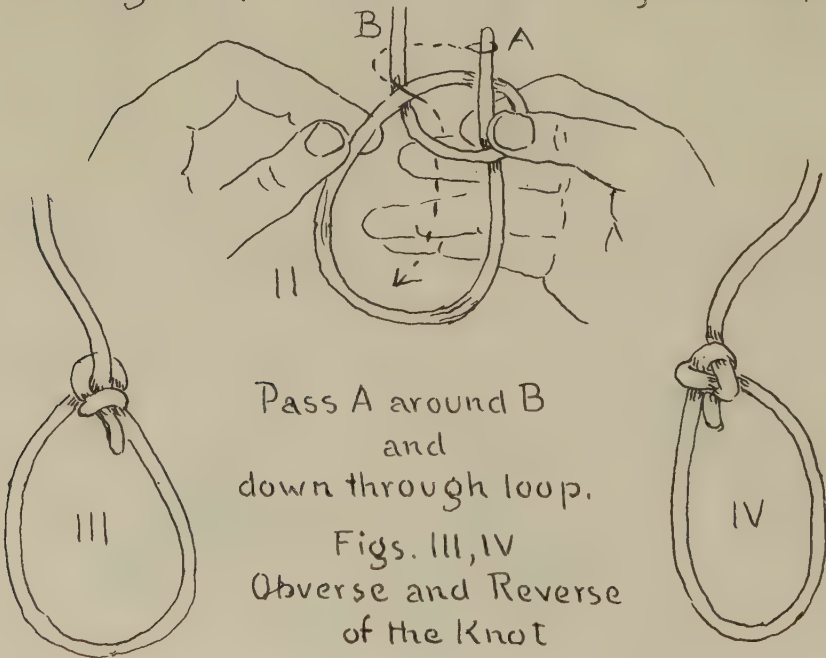


BOWLINE.

Lay the end A on the standing part B

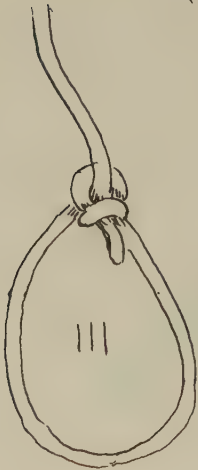


Turn the palm of the right hand up, forming a loop with the end A through the loop

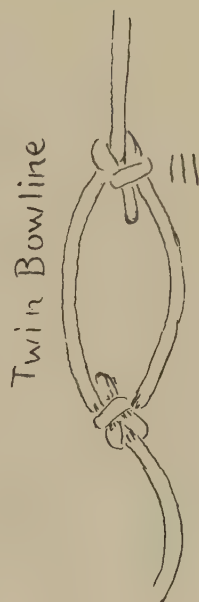
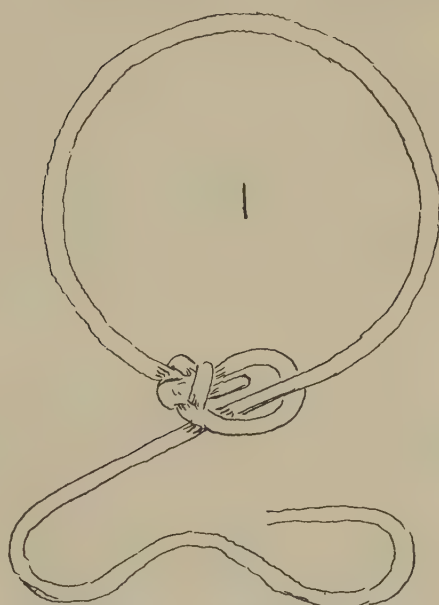


Pass A around B
and
down through loop.

Figs. III, IV
Obverse and Reverse
of the Knot



27
RUNNING BOWLINE



Crabber's Knot

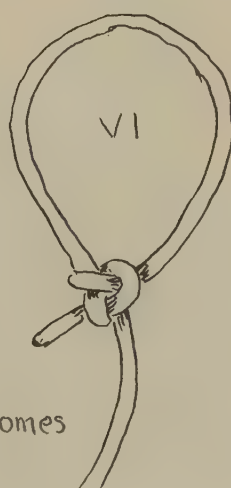
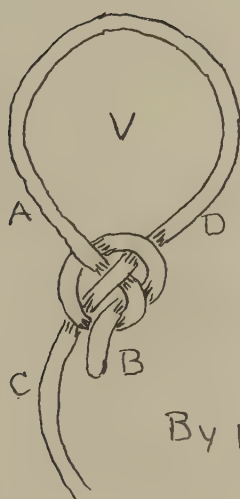


Fig. V is a Noose on the
 running Line CD
 By pulling A & B the Noose becomes
 a Loop Fig VI

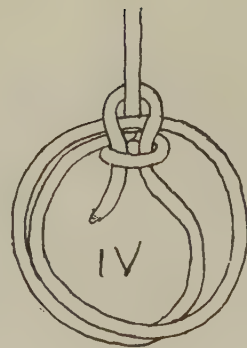
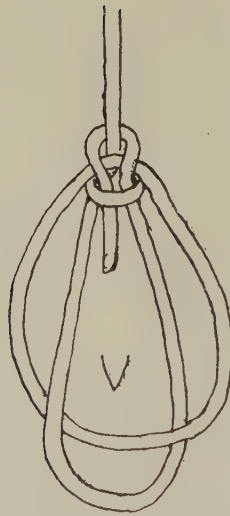
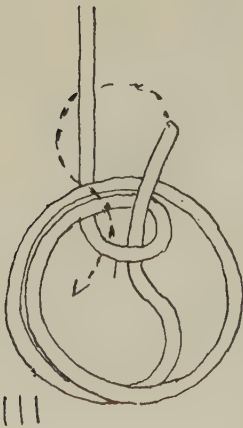
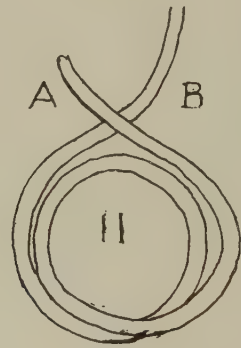
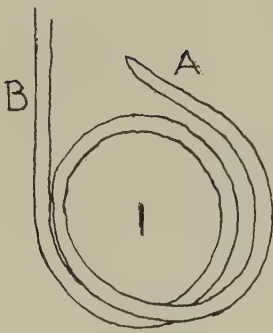
PORTUGUESE BOWLINE

Chaise de Calfat

Caulker's Chair

Fig. I - is a double Loop

Fig. II - Where end A crosses the part B
 tie a Bowline (III-IV)
 around
 the two lines

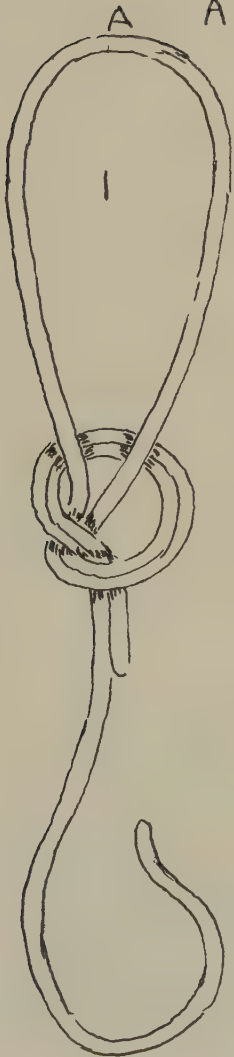


The result
 is an adjustable
 Double Loop

BOWLINE - ON-BIGHT

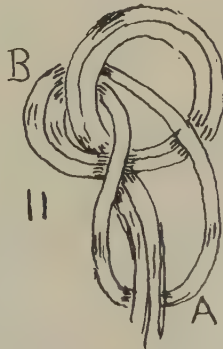
This Knot
may be tied with the bight
on any part of the line

A short length of a long rope
may be used without
cutting it



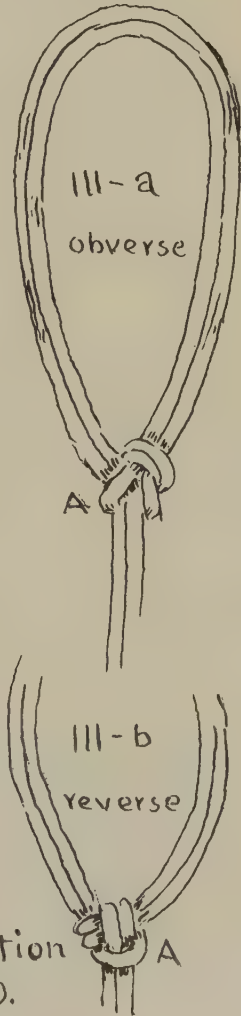
With the Loop A
tie an Overhand Knot
Fig. I

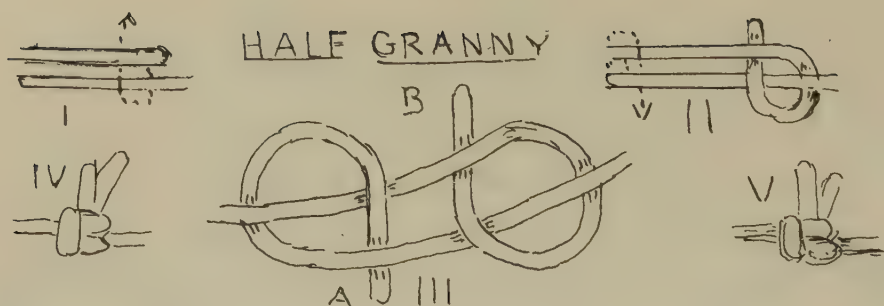
Pass the Loop A
back under the Knot
Fig. II



With the strands at B
Fig. II

pull the loop A into the position
shown in Figs. III-(a & b).





This knot, when pulled taut, is peculiar
Figs. IV, V

The two ends lie side by side
The two faces, both obverse and reverse,
are alike.

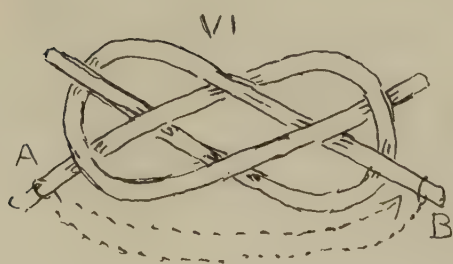


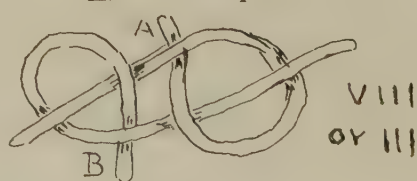
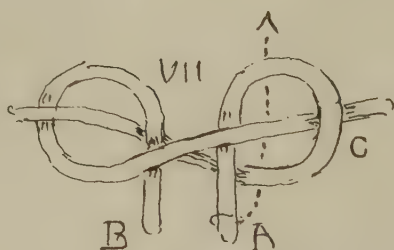
Fig. VI
is the form of the knot
shown on pages 15-16.

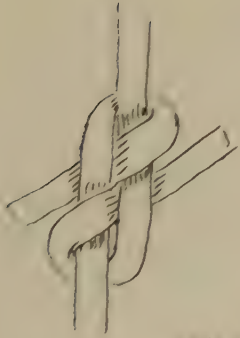
When pulled taut,
it takes the form shown
in Fig. IV (or V)

In Fig. VI interchange A & B
to form VII

In Fig. VII turn the right
hand half of the knot
over to form Fig. VIII
(or Fig. III above)

III, VI & VII, when taut are
alike and are forms of the
HALF GRANNY

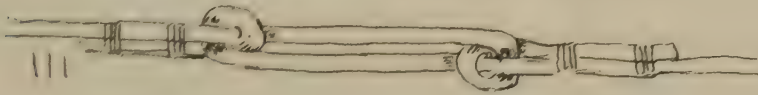




THE GRASS KNOT
is the Half Granny as a
bend for straps, straw,
grass or
such flat material

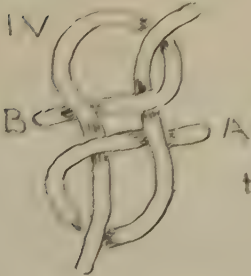


THE REEVING LINE BEND

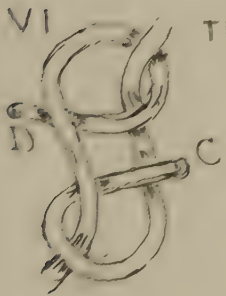
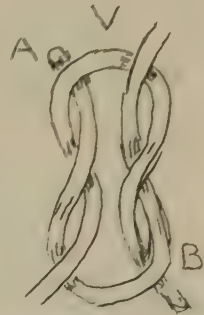


is a form of the Half Granny

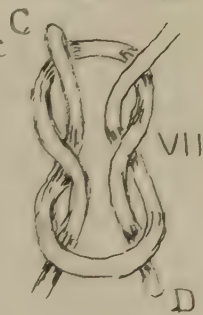
NOTE

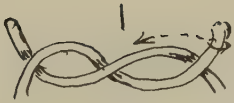


In the Half Granny
Fig. IV
by interchanging
the ends A & B
the knot passes into
the Oblique Granny
Fig. V

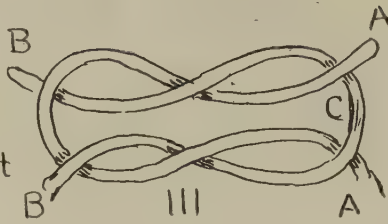


The Half Granny must not
be confused with Fig. VI,
which slips and which,
by interchanging
C and D,
passes into the
Thief (Oblique Reef) Knot Fig. VII

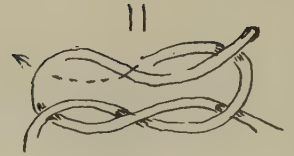


THE GRANNY

Tie an
Overhand Knot
Fig I



in such manner that
the ends A A
lie on opposite sides of the bight C



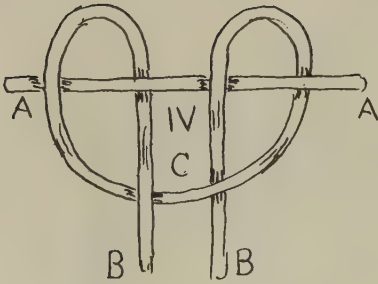
Tie
another backwards
Fig II

GRANNY

and

CLOVE HITCH

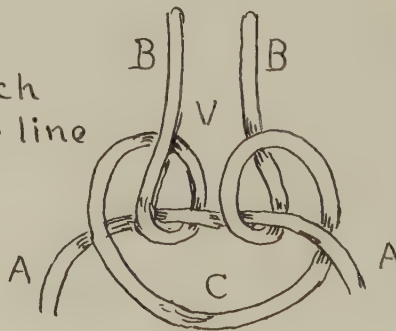
See page 5, Fig 11



Straighten
the line A A, Fig III
The parts BB-C become a
Clove Hitch
around the line A A

A Granny, therefore, may be tied as follows.

Tie a
Clove Hitch
around the line
A A
Fig. IV



Turn the
ends BB up
around A
and
pull BB and C
Fig. V

OBLIQUE GRANNY

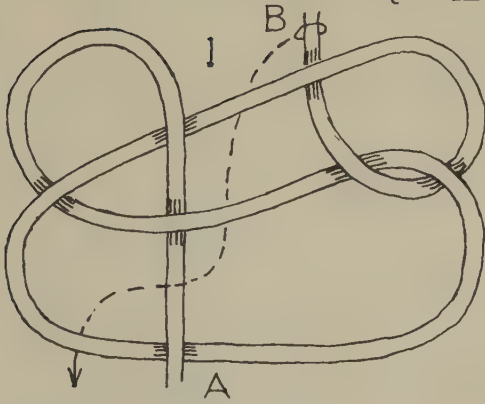
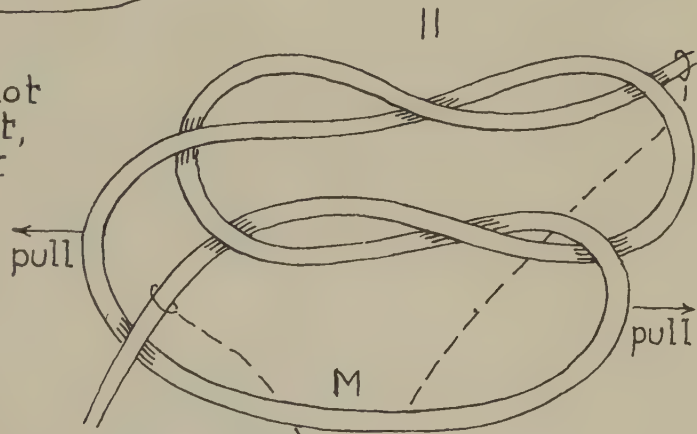


Fig I is the Half Granny.
Pass the end B down
under two strands and
over the strand A.

The knot becomes
Fig II
The Oblique Granny

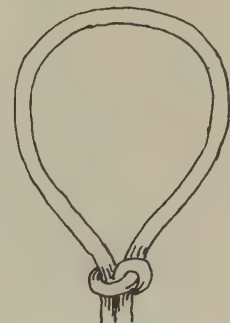
When this knot
is pulled taut,
it slips apart
and will not
hold.



But, by bringing the ends
A & B together Fig. II,
by holding A & B in one
hand and the part M
in the other, Fig II
becomes a reliable Loop.

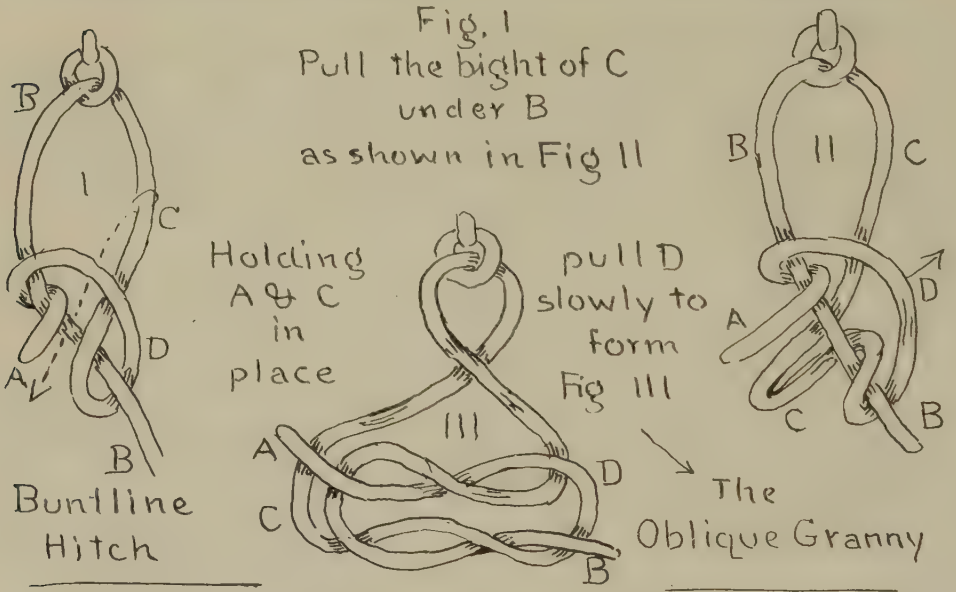
B ↓ A

See page 5

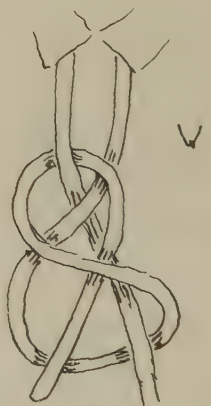
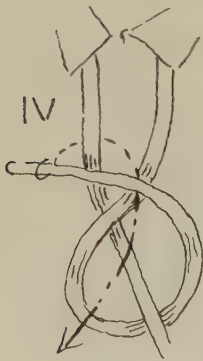


The Japanese method of tying
this Loop is shown on page 148.

BUNTLINE HITCH AND OBLIQUE GRANNY

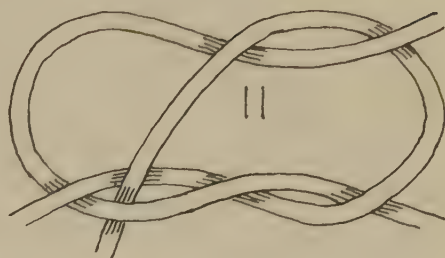
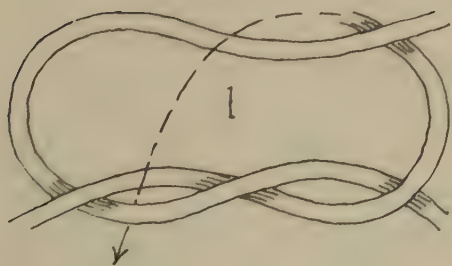


FOUR- IN-HAND TIE



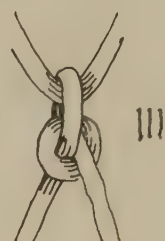
Buntline Hitch

SINGLE CARRICK BEND



The two bights that form the finished knot, lie on planes perpendicular to each other.

The lay of the strands resembles that of the four strand Round Braid.



Single Carrick

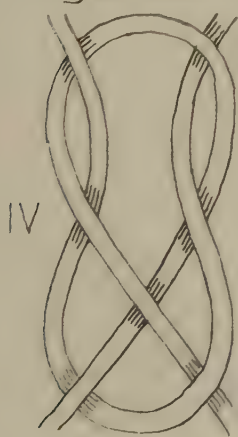


Fig. IV

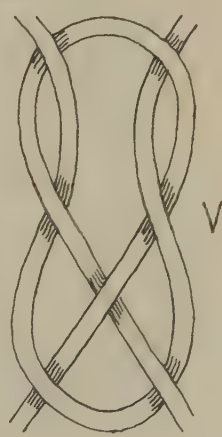
Single Carrick

and Fig. V

Half Carrick

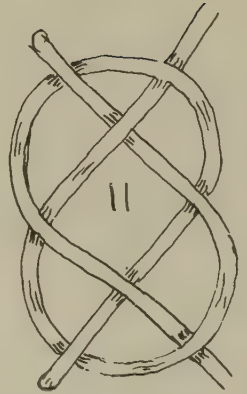
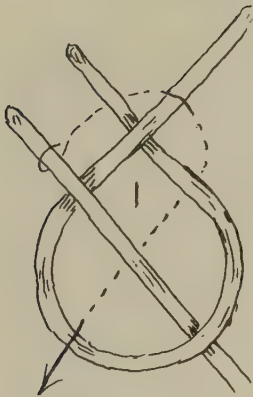
are very much alike. They differ in the braiding of their strands, alternately over and under in Fig V very irregular in Fig IV

Half Carrick



DOUBLE CARRICK No. 1

This Knot
differs from
the Double Carrick No 2
by the
irregular braiding
of the strands



III



Fig.V begins with an
Overhand Knot Fig. IV

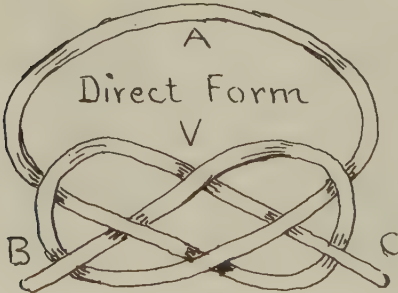
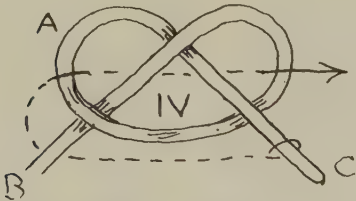
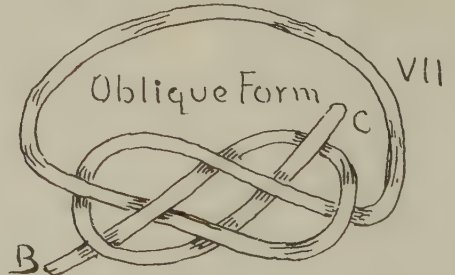
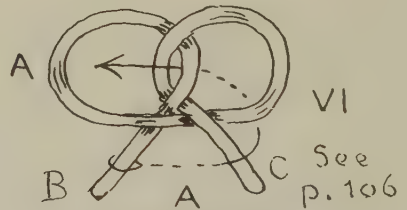


Fig.VII begins with the
Miller's Knot Fig. VI



HALF CARRICK

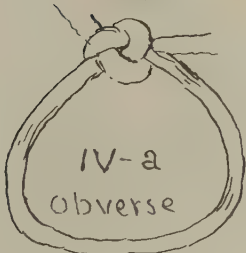
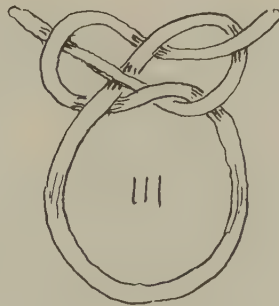
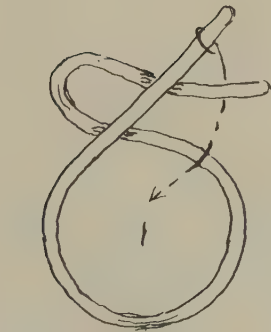
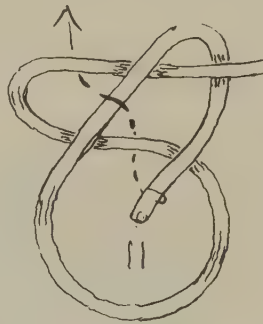
This is Nameless-2 of the first edition



in one half (M) of the knot, have the lay characteristic of the Double Carrick-No. 2,

The strands of the other half (N) correspond with the lay of the Granny.

So far as I know
this knot
is not in use



OBLIQUE HALF CARRICK

In Fig II
bring the ends
A & B
together

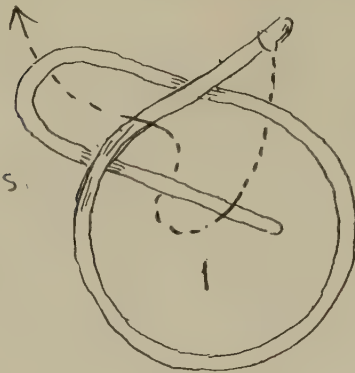


Fig III
Hold A & B
in one hand and
pull M

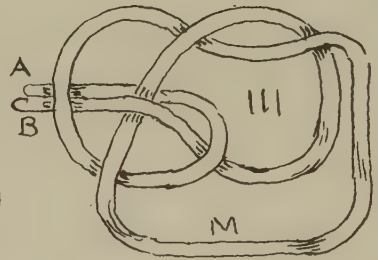
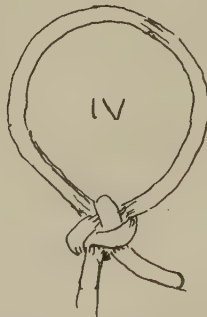
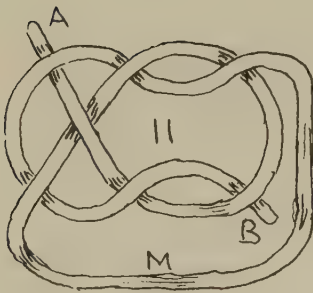
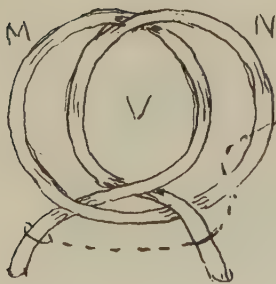
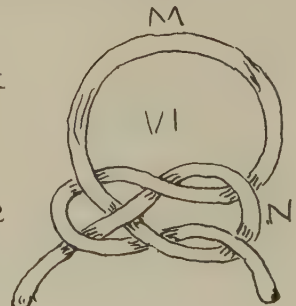
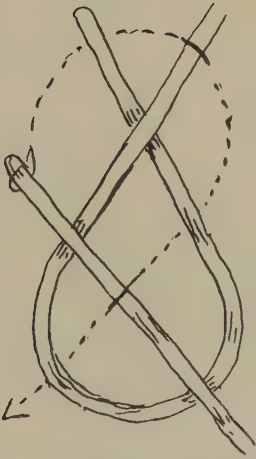
HALF CARRICK and MILLER'S KNOT

Fig. V,
the Miller's Knot
(pages 12, 106)
can pass
by a slight change
into Fig. VI,
the Half Carrick



39

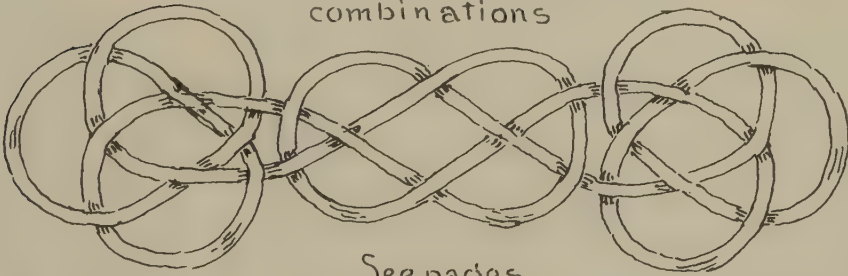
DOUBLE CARRICK
No. 2



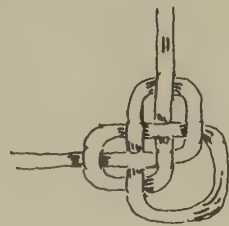
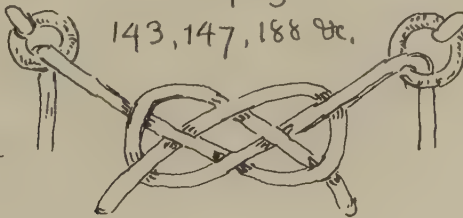
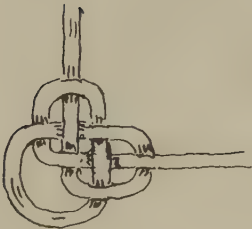
This knot
differs from the
Double Carrick No 1
by the
regular braiding
of its strands



The
symmetry & beauty
of this knot is such that
it often appears in ornamental
combinations



See pages
143, 147, 188 &c.



OBLIQUE DOUBLE CARRICK No. 2

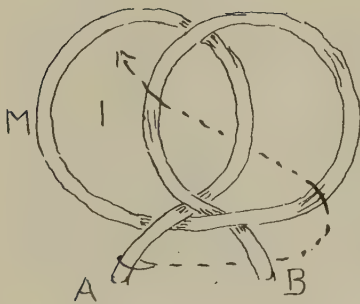


Fig. I
the two
Half
Hitches of
the
Clove Hitch

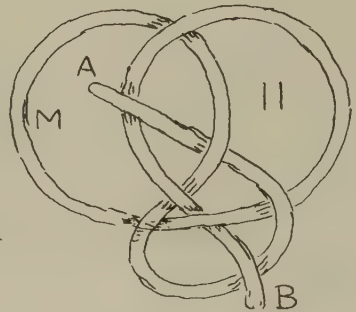


Fig. III
the
Oblique
Double Carrick
No. 2

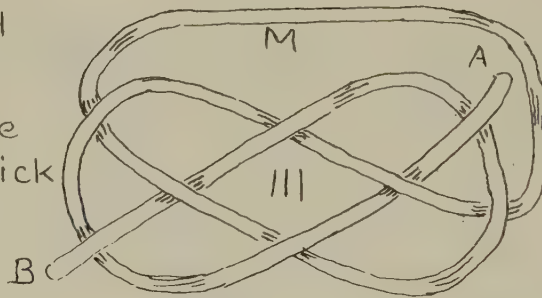
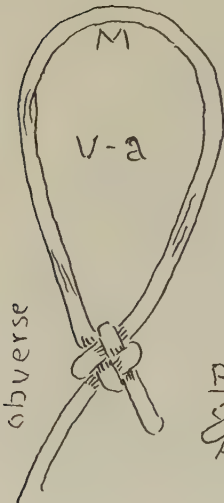
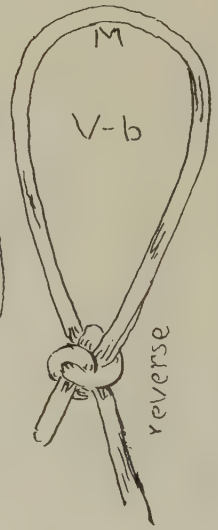
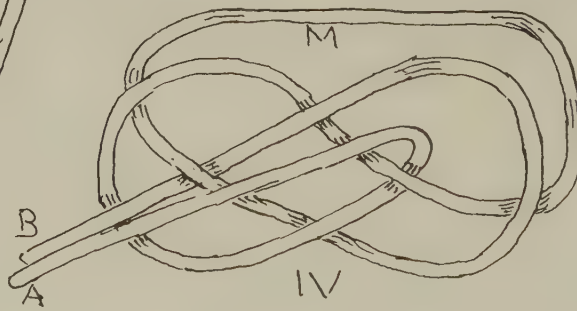


Fig. IV
the ends
A & B
are brought
together



obverse

Hold A and B
and pull the standing part M



reverse

NOOSE

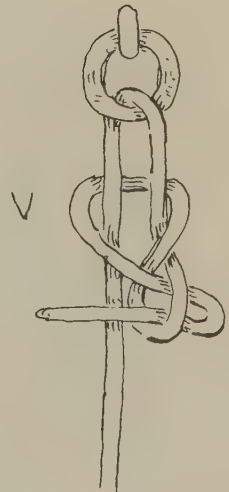
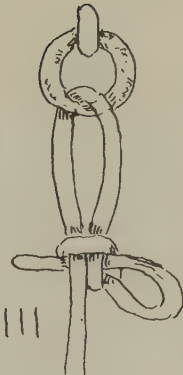
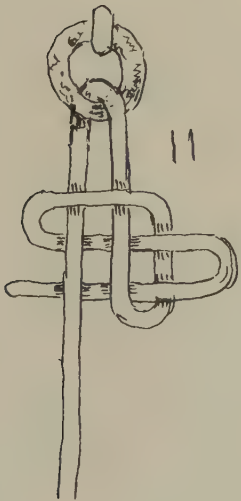
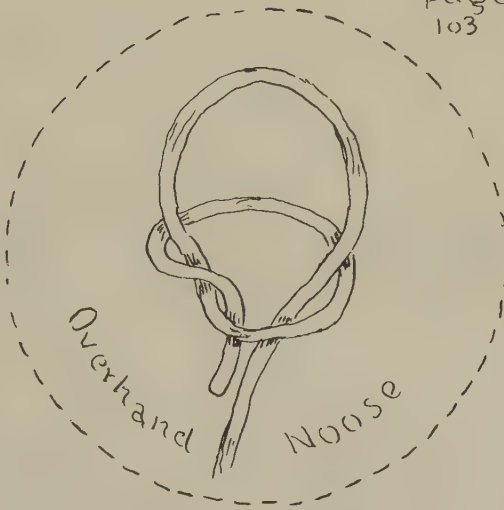
Halter
Tie

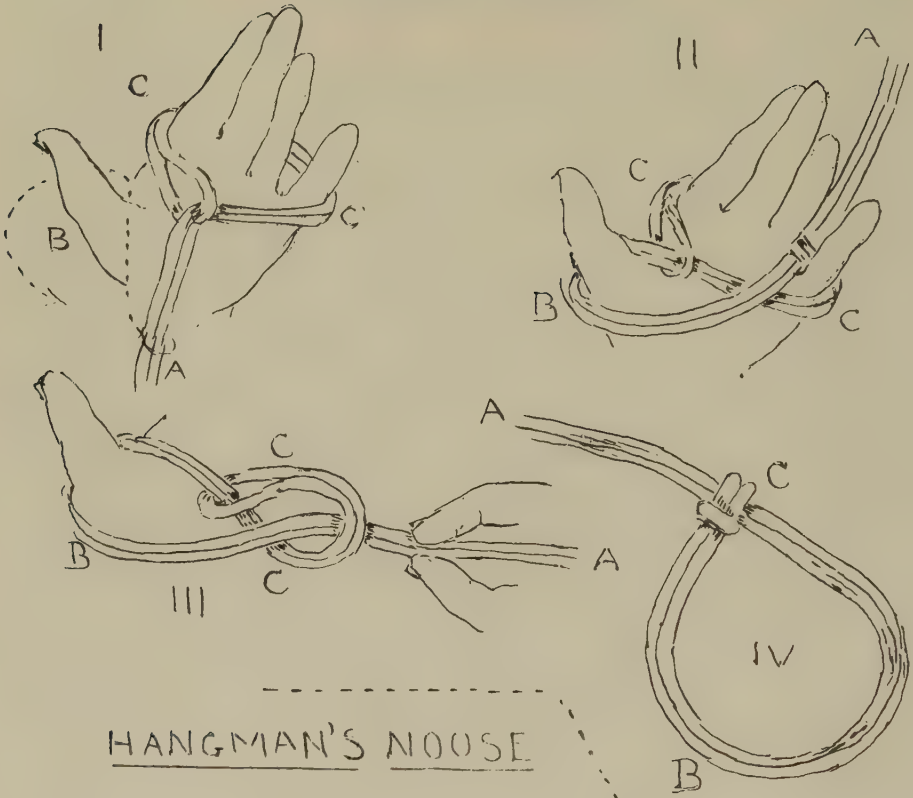
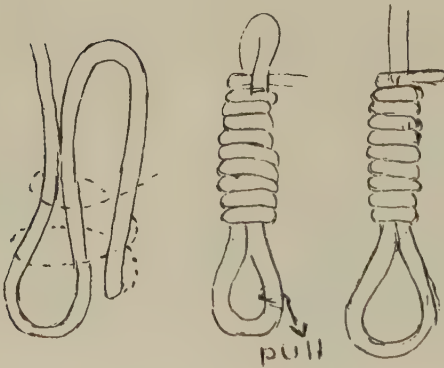
Figs. I, II, III

Figure of 8
Tie

Figs. IV, V, VI

See
page
103



DOUBLE NOOSEHANGMAN'S NOOSE

The
Hangman's Noose
is tied with
eight or nine
turns
of the rope

43

LOOP

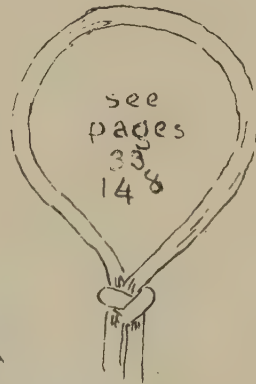
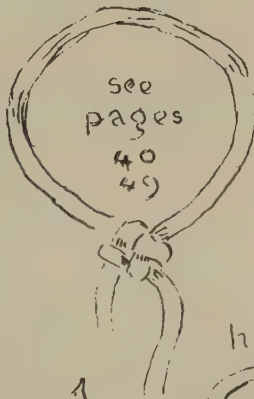
Noose & Half Hitch

The size of the loop
may be changed

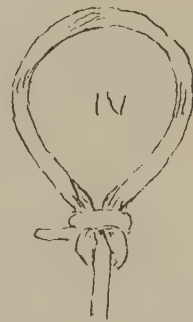
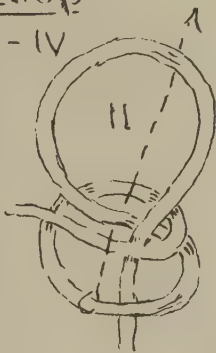
after the knot is tied

→ by manipulating xy

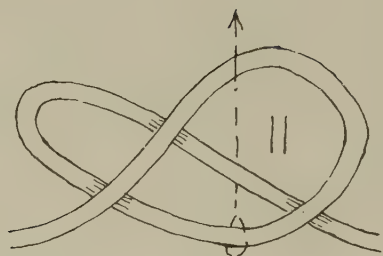
Japanese Loops



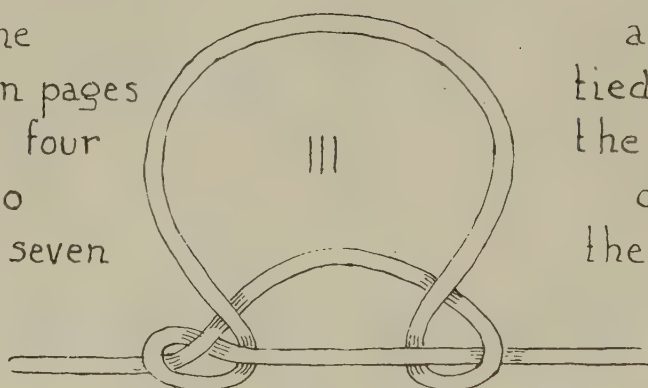
Angler's Loop I-IV



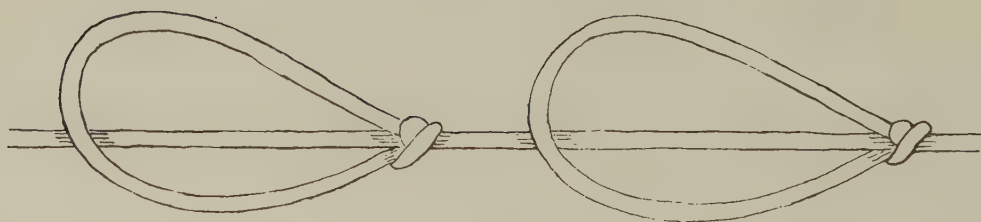
44
ARTILLERY
or
MAN-HARNESS
KNOT

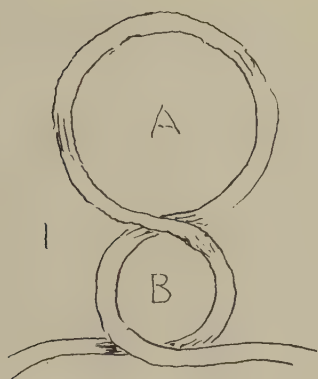


The
Knots on pages
Forty four
to
Forty seven

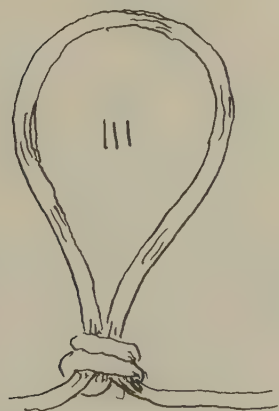
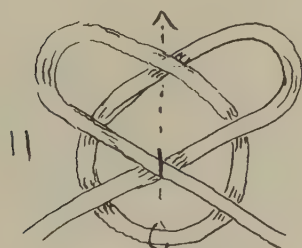


are
tied with
the bight
of
the line



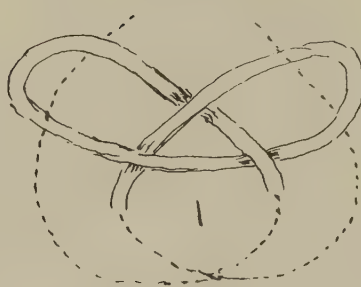
LINEMAN'S KNOT

Pass A
down behind B

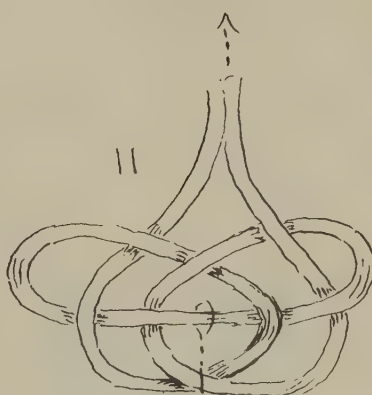
LOOP

beginning with an
Overhand Knot

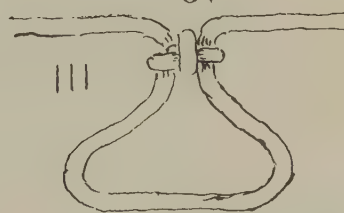
Fig. 1

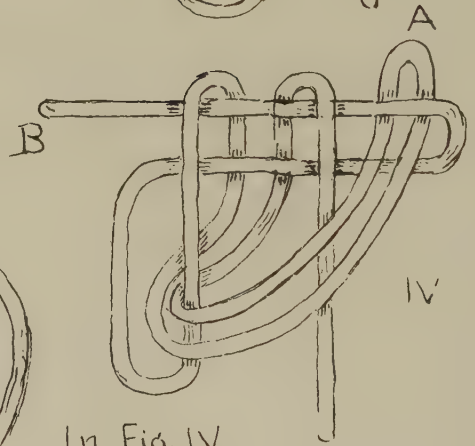
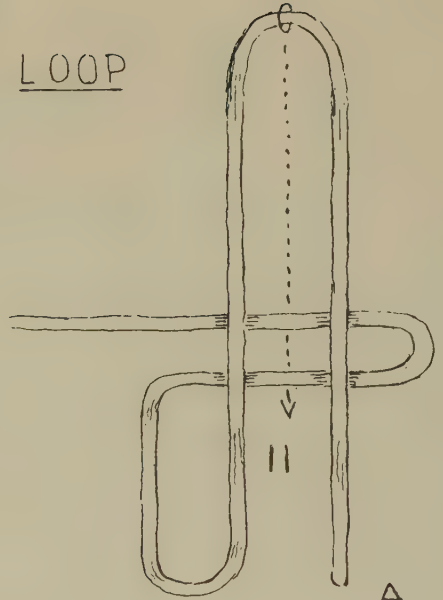
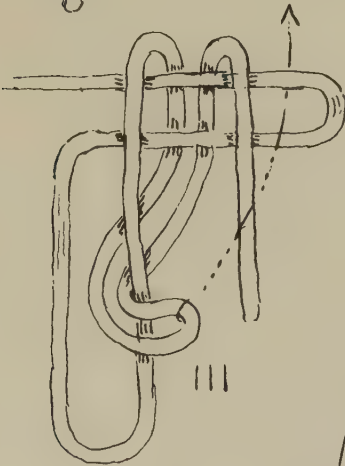
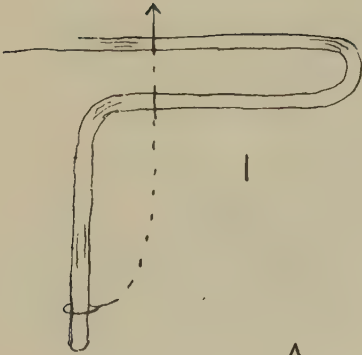


Pull

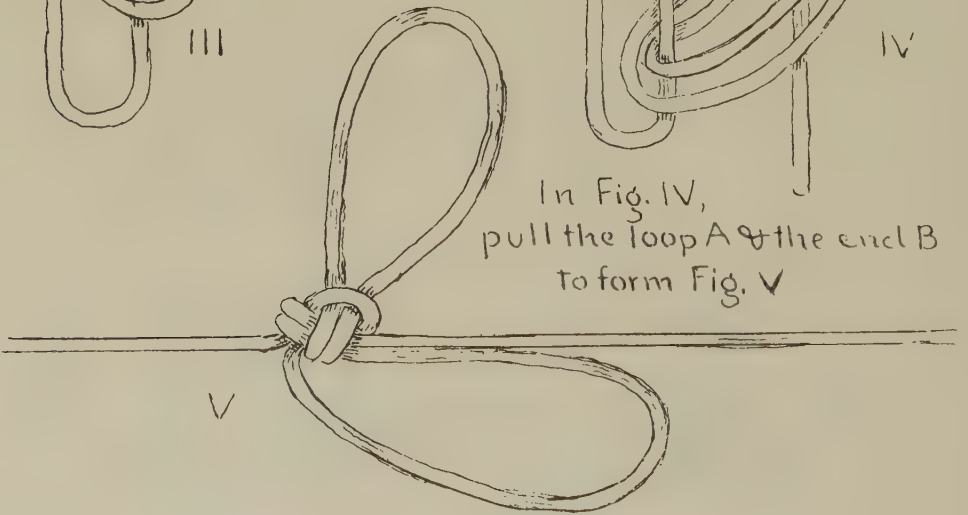


Pull



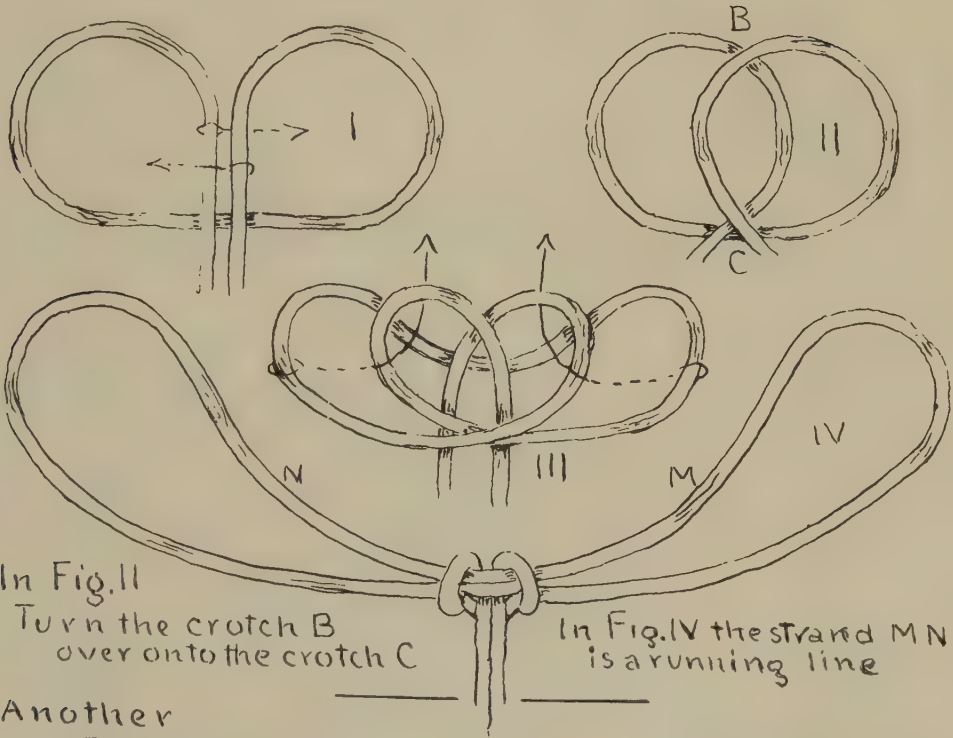
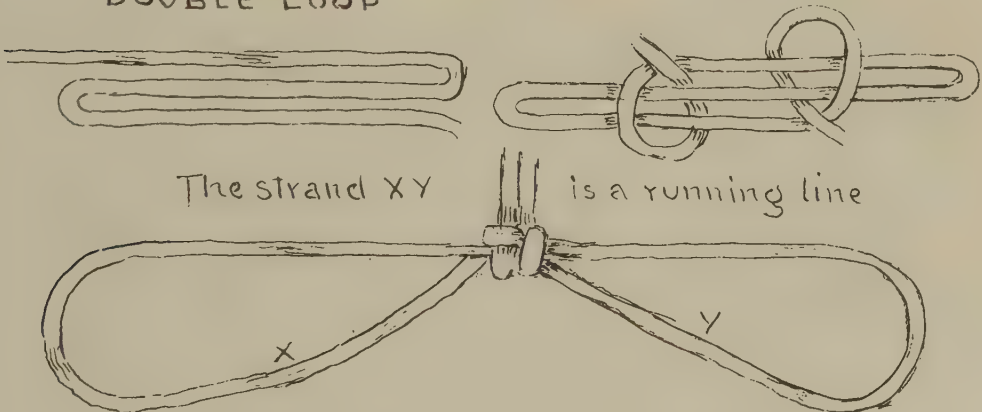
DOUBLE LOOP

In Fig. IV,
pull the loop A & the end B
to form Fig. V



DOUBLE LOOPS

SPANISH BOWLINE

Another
DOUBLE LOOP

STOPPER KNOTS



STOPPER KNOT of two Strands

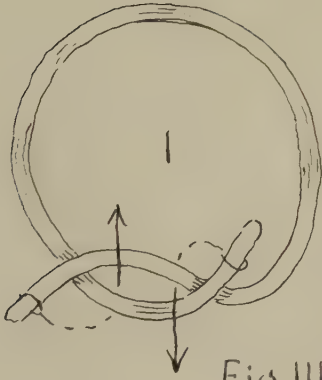


Fig II
Pass A under B
to form

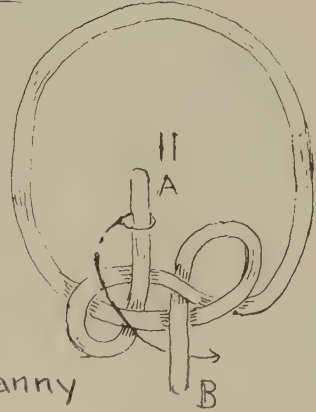
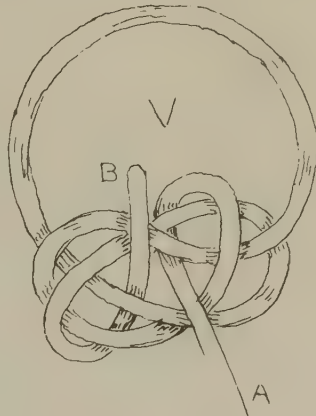
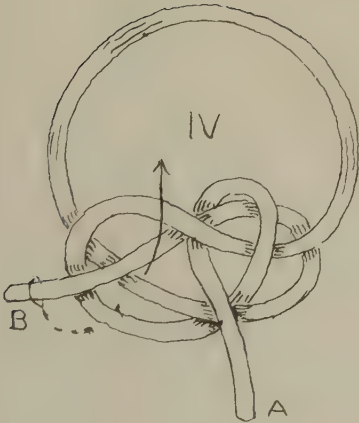
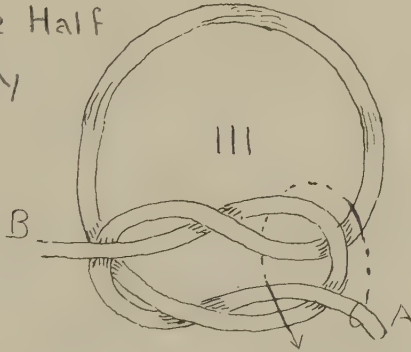
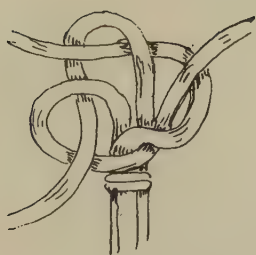


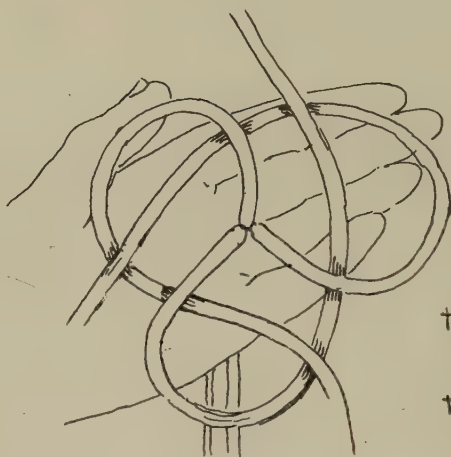
Fig. III- The Oblique Granny

Fig. II is the Half
Granny

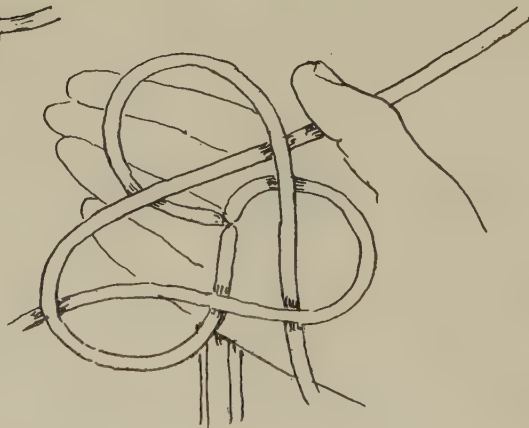
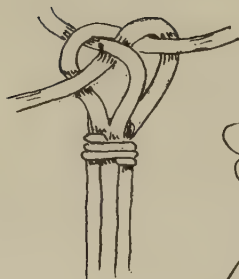


WALL KNOT

with 3 cords
the wall may be
tied
to the right
or
to the left

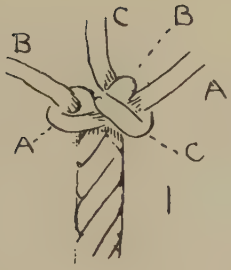


With a
rope
the wall must
follow
the lay of the
strands

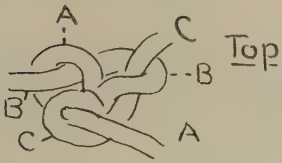
CROWN KNOT

MAN-ROPE KNOT

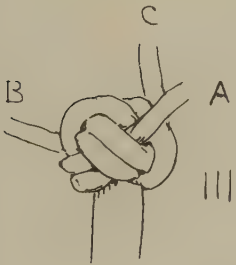
A
combination
of the
Wall & Crown
with the strands doubled



Single Wall



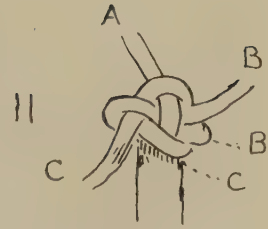
In doubling
each strand follows
its own lay



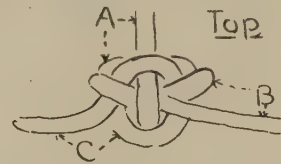
Double Wall
&
Single Crown



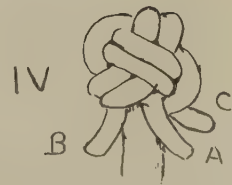
The 3 ends ABC
Fig III
are passed down
through the center of
the knot
Fig. IV
and are cut off



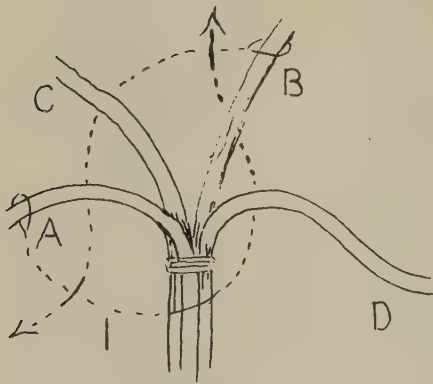
Single
Wall & Crown



The Crown
Fig. II
brings each end
against
its own part

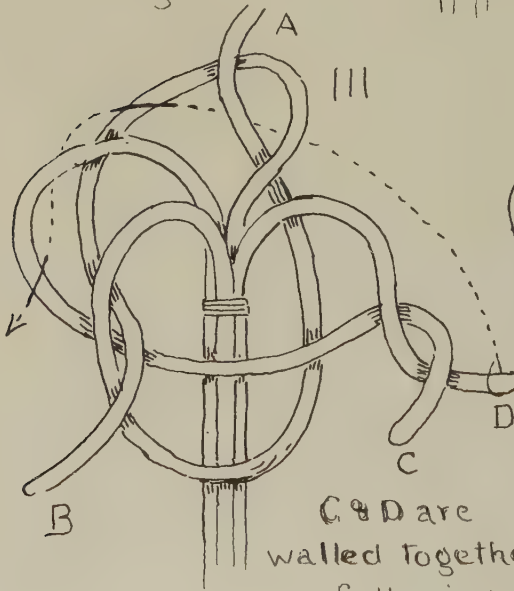
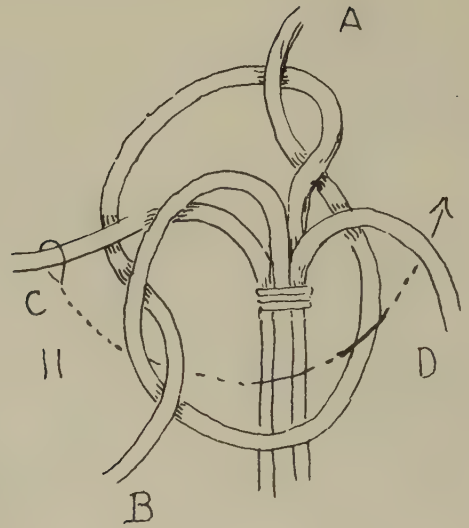


Double
Wall & Crown

TWIN WALL KNOT

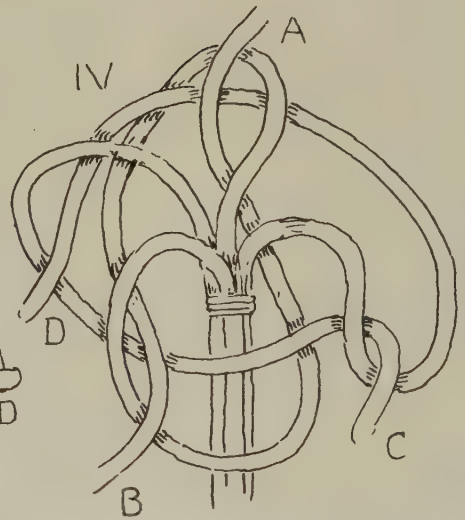
Wall A & B together
around C & D

Fig I, II



C & D are
walled together

Following the dotted lines



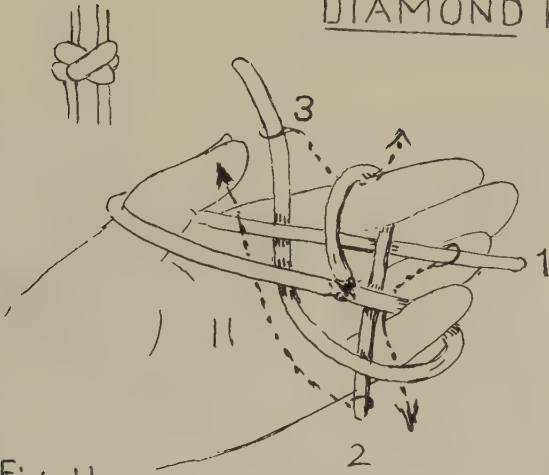
DIAMOND KNOT

Fig. II

Pass 1 around the thumb.
 2 around the forefinger.
 3 around the little finger
 forming 3 loops

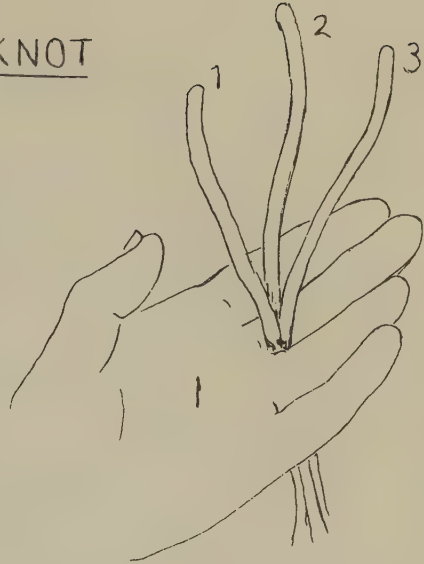
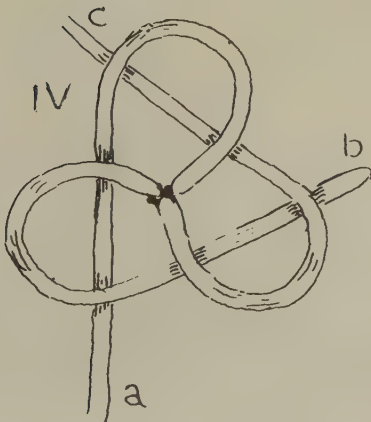
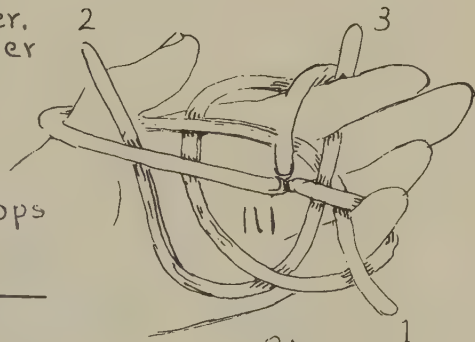
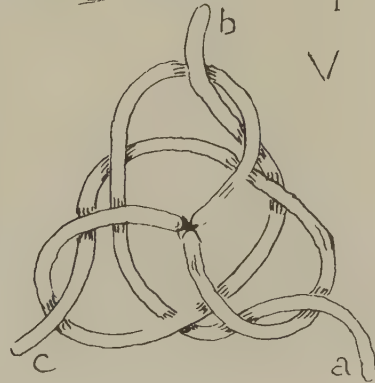


Fig. III

Pass the ends through the loops
 in the order shown

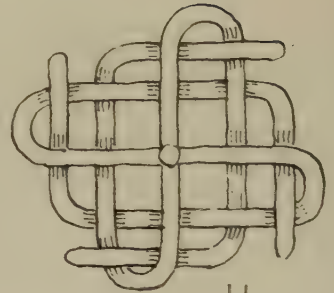
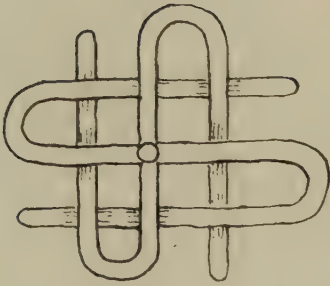


or



DIAMOND KNOT

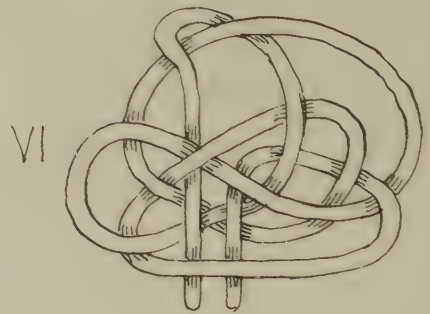
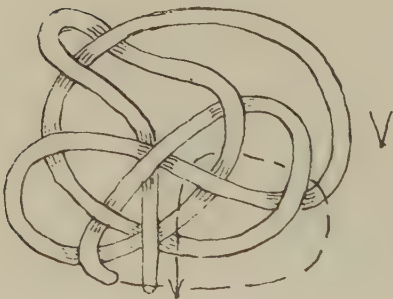
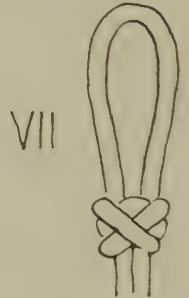
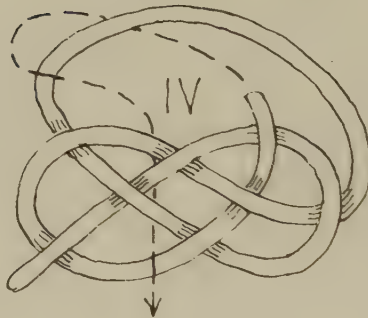
of
Four
Strands



DIAMOND

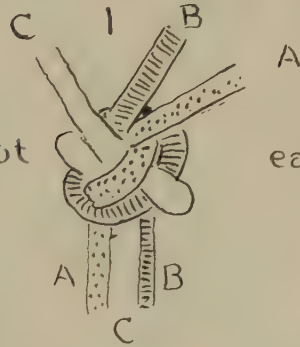
of
Two Strands

Fig IV
The
Oblique
Double Carrick
No 2
See page 40
Fig III



DOUBLE DIAMOND

Fig 1 is the
Diamond Knot



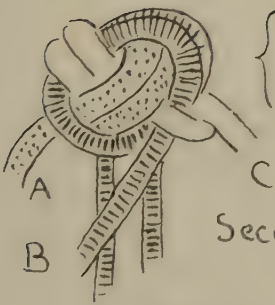
In doubling
each strand follows
its own lay

For practise with this, and with the various
Stopper Knots,
the construction is more easily followed if the strands
are of different colors.

First stage.

II

In Fig. I

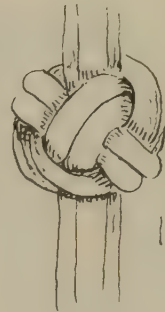


{ pass A over C & under B
pass B over A & under C
pass C over B & under A
to form Fig II

Second stage

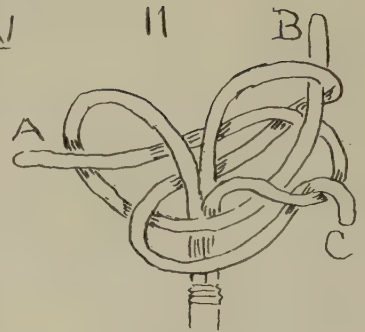
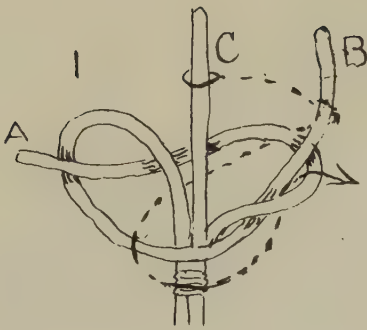
In Fig. II

{ pass A over both strands of C & under both strands of B
pass B over both strands of A & under both strands of C
pass C over both strands of B & under both strands of A

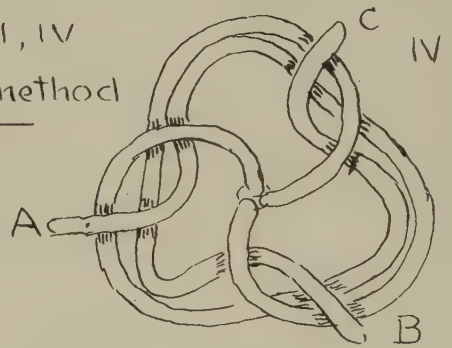
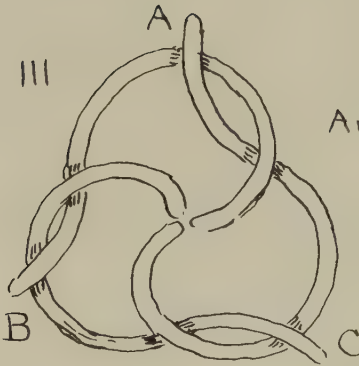


III

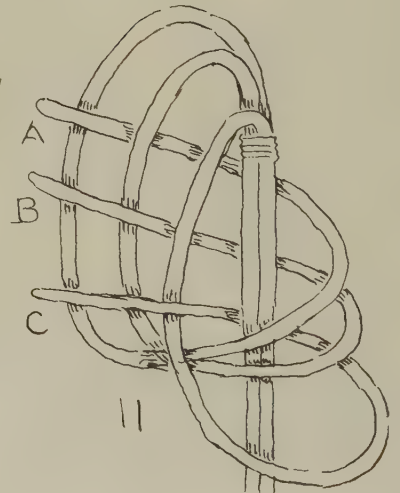
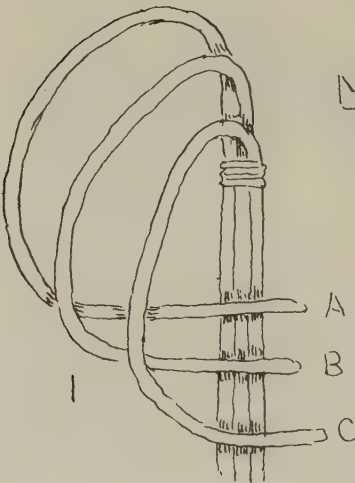
SINGLE
MATTHEW
WALKER

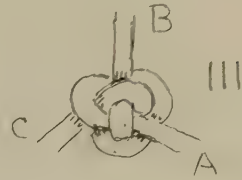
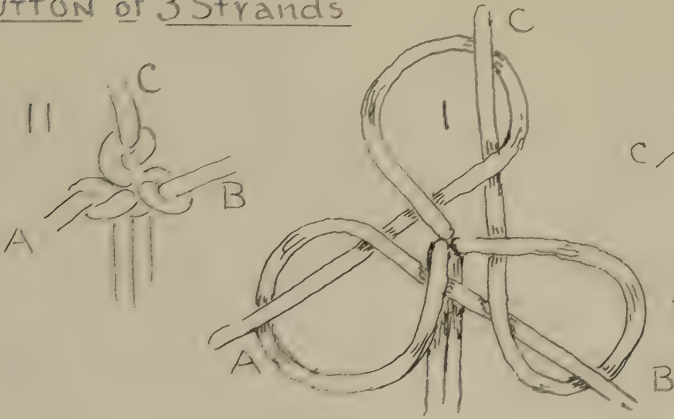


Figs. III, IV
Another method



DOUBLE
MATTHEW
WALKER

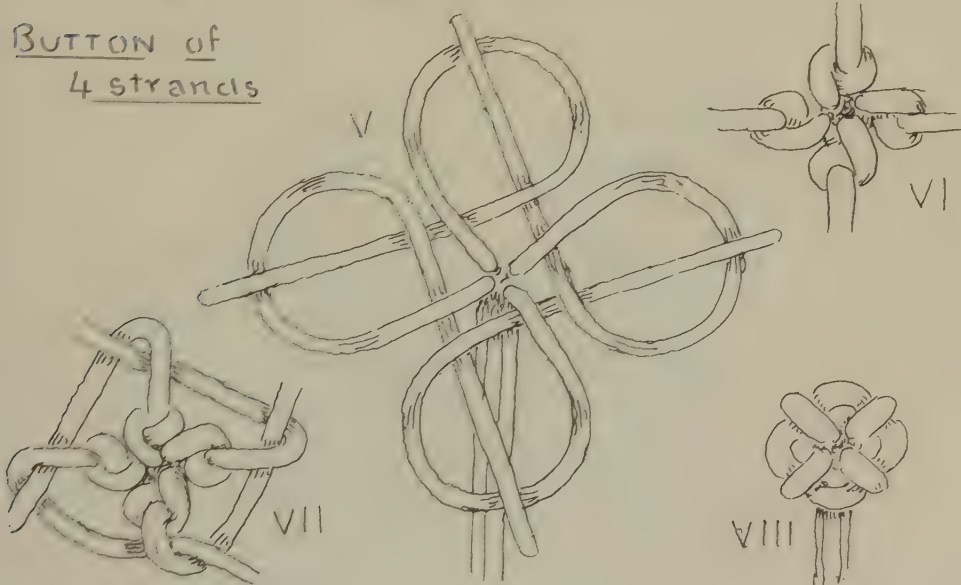


INVERTED WALL KNOTButton of 3 Strands

In Fig. III
the 3 strands
A, B & C
are
crowned



In Fig. IV
the 3 ends are passed down
through the centre and cut off

Button of 4 strands

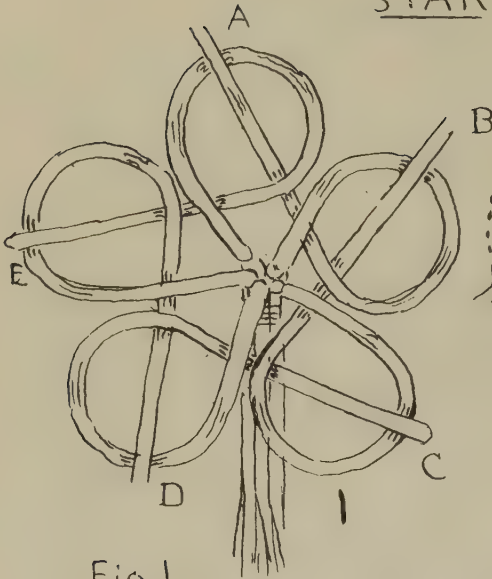
STAR KNOT

Fig. I
Inverted Wall Knot
of 5 strands

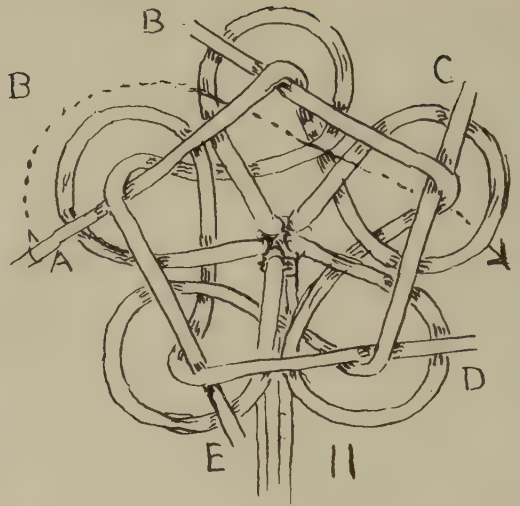
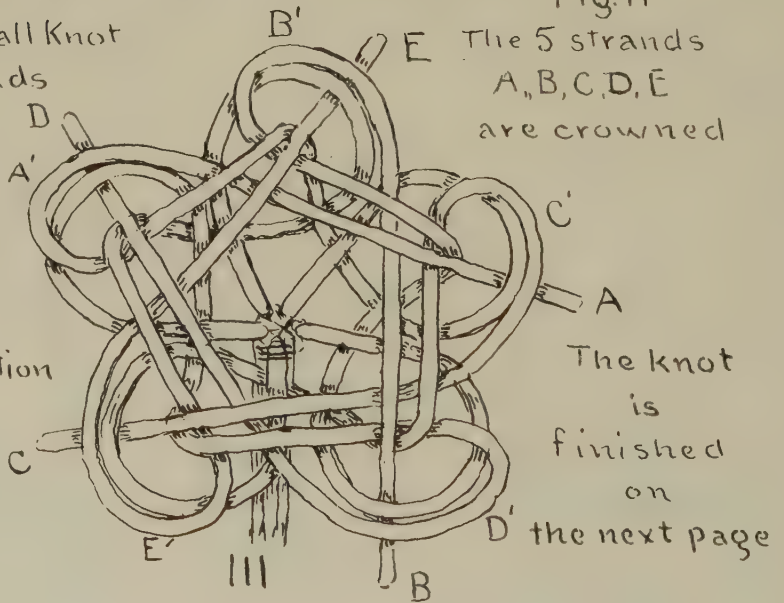


Fig. II
The 5 strands
A, B, C, D, E
are crowned

Fig. III
A'A, B'B, C'C
D'D & E'E
show
the next position
of the
5 strands



The knot
is
finished
on
the next page

STAR KNOT

Continued

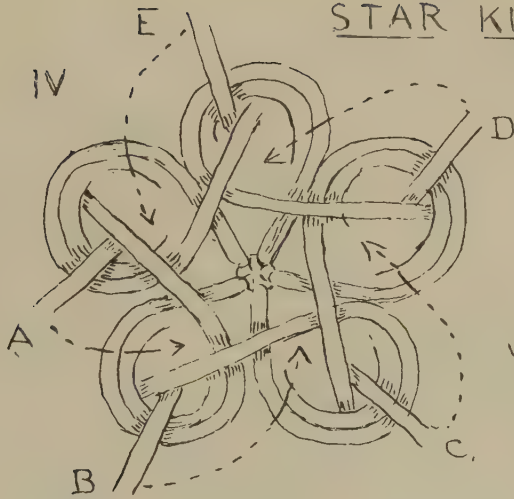


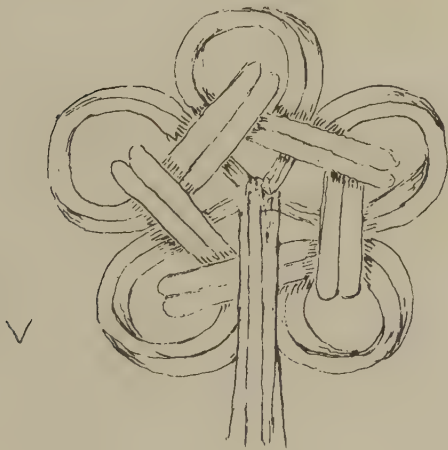
Fig IV

is
the reverse side of
Fig. III
with some of the strands
omitted
to avoid confusion

Fig V

(reverse side)

The ends A, B, C, D and E
following the arrows in Fig IV
pass up through
the bights and the center of the
knot



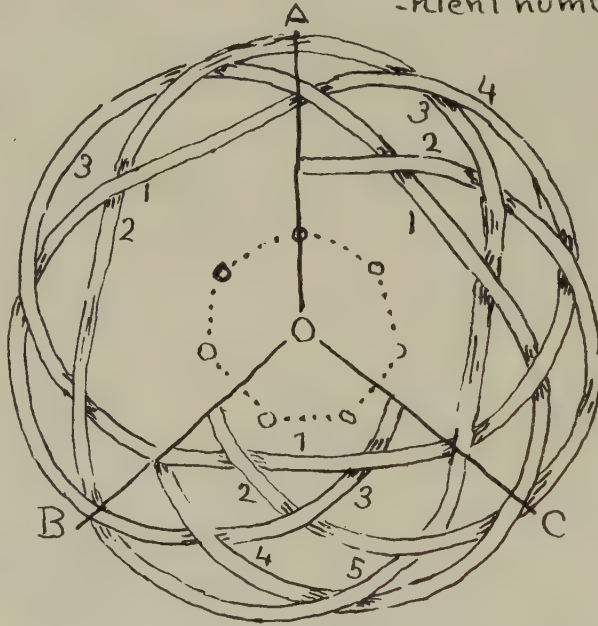
VI



TURK'S HEAD

A Turk's Head may be defined
as a complex of like interlacing circles
so united as to form a single line, and whose centers are
the angles of a regular polygon of 3, 4, 5 or of any conve-
-nient number of sides.

This diagram
shows 3 forms of Turk's Head
with the same heptagonal center.



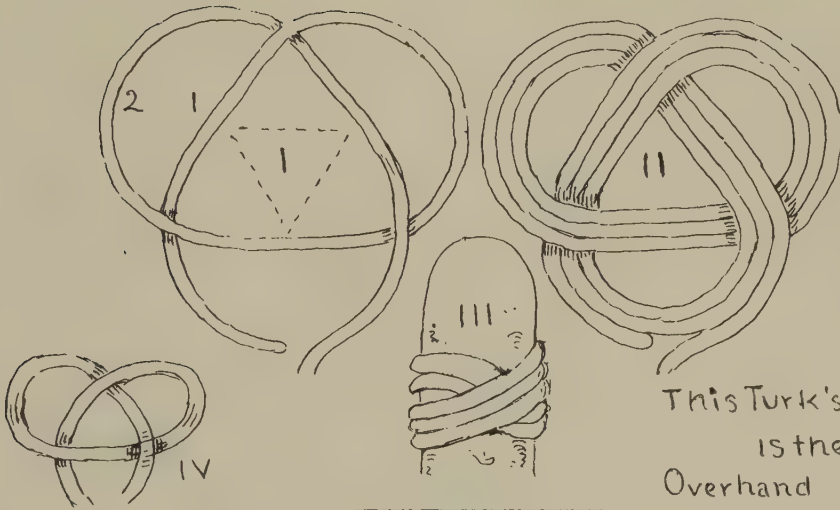
The lines AO, BO, CO,
divide the figure into three
sections

The section AOB
represents a heptagonal Turk's Head of three strands

the section AOC of 4 strands		the section BOC of 5 strands
---------------------------------	--	---------------------------------

TURK'S HEAD Triangular Center

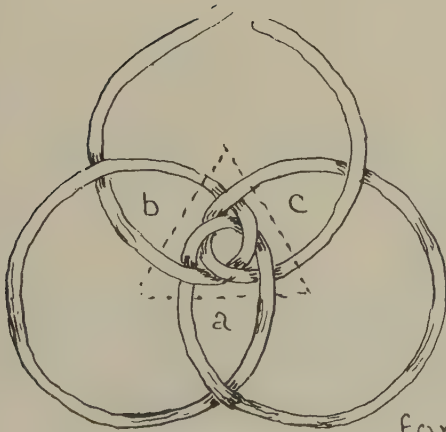
Two strands



This Turk's Head
is the
Overhand Knot

A Triangular Turk's Head
with 4 strands

Fig. IV



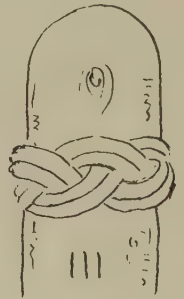
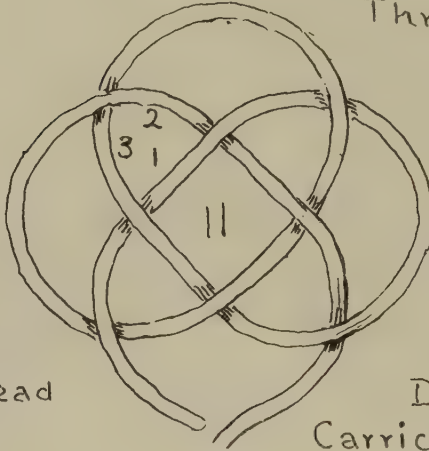
In this Turk's Head the circles
are joined in one line
by means of
loops
a, b, c.

On account of the crowded
interlacing
at the center of the knot
this method is not practicable
for centers of four or more sides

TURK'S HEAD

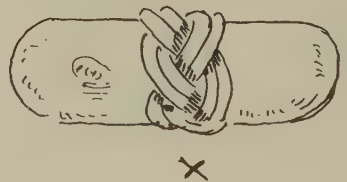
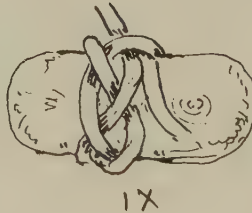
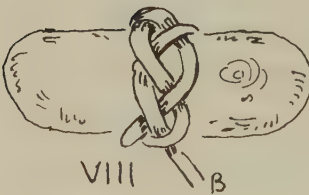
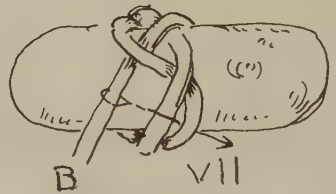
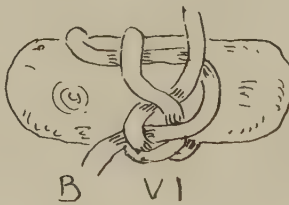
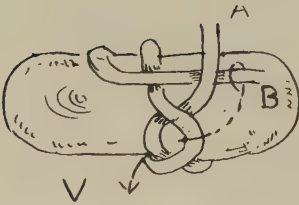
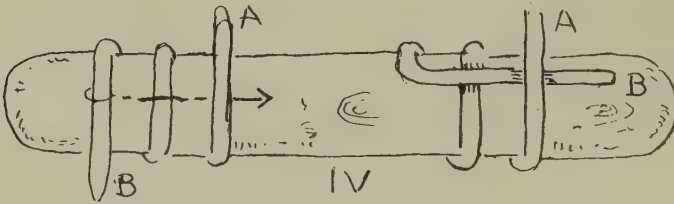
Quadrangular Center

Three strands



This Turk's Head
is the

Double
Carrick Bend, No. 2
Fig 1



63

TURK'S HEAD

of
3 strands
and
pentangular center

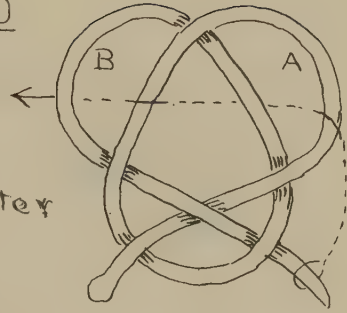
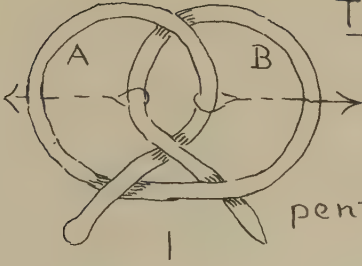
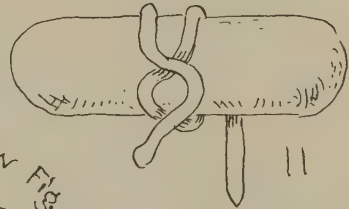
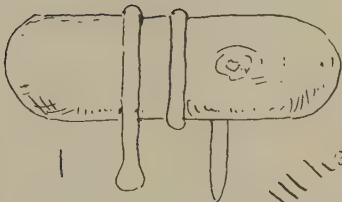
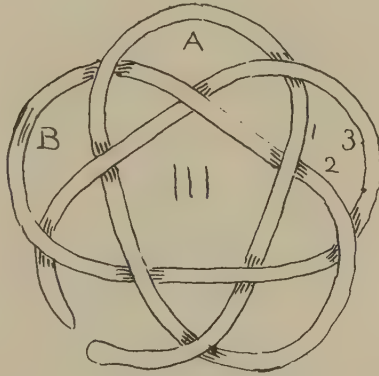
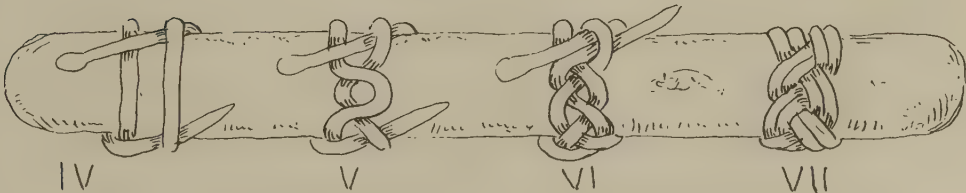


Fig. I
is
a form of
the
Figure of Eight
Knot
page 12



Turn III half over to show Fig. IV



TURK'S HEAD

pentagonal,
of
three strands,
tied on the
hand

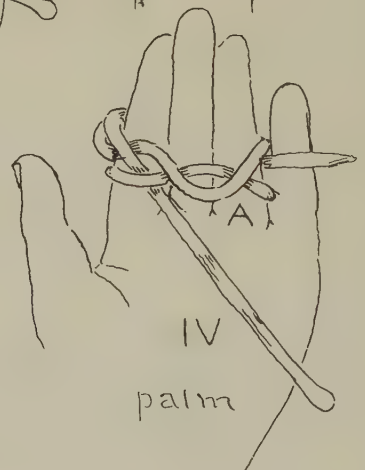
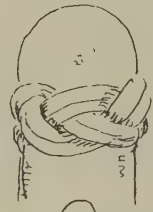
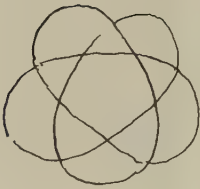
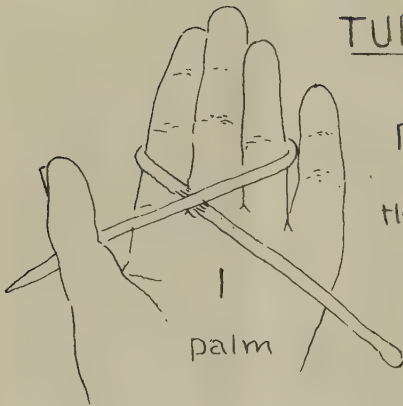


Fig IV - The bights are crossed
at A

TURK'S HEAD

of

four strands

and pentangular center

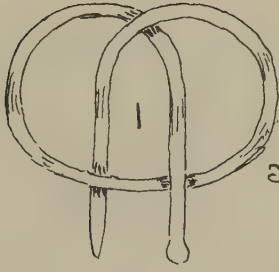
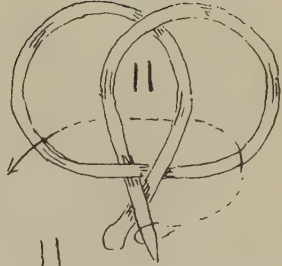
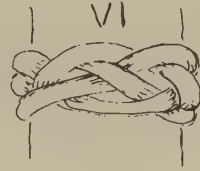


Fig 1
is the
Overhand
Knot



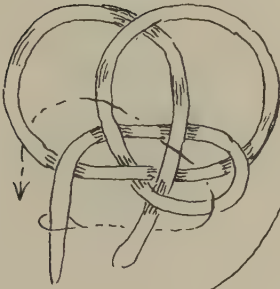
II



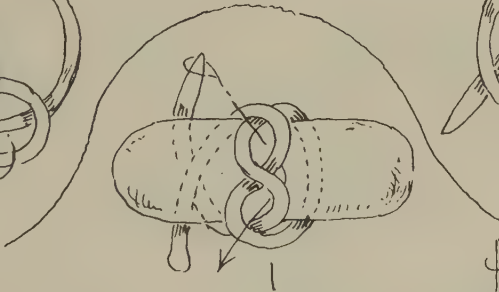
IV



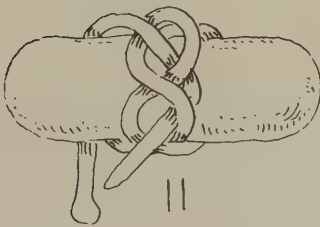
V



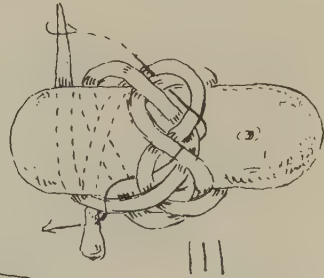
III



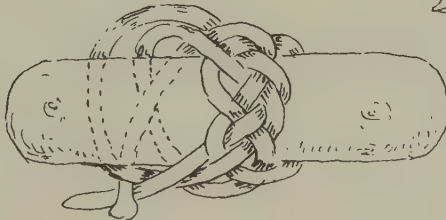
IV



II

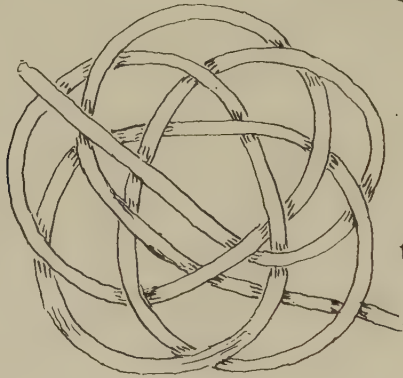
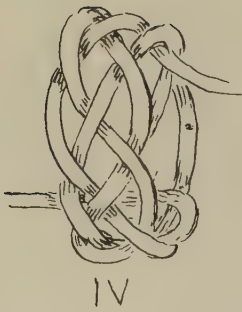
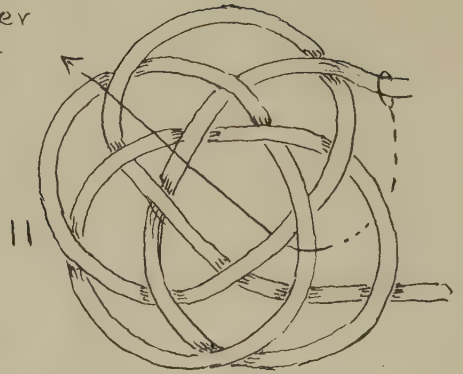
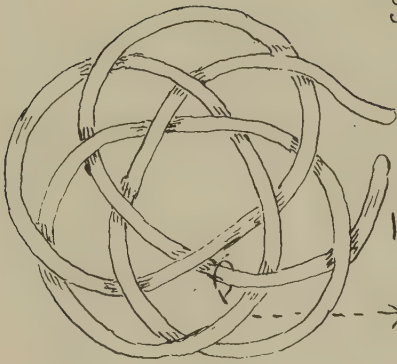


III

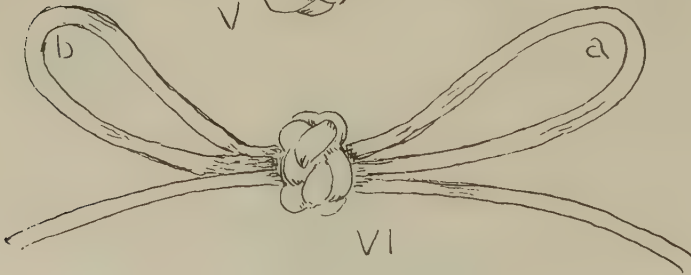


TURK'S HEAD

as a
Stopper
Knot



In Fig. VI
the bights of the
ends are
pulled through
the knot, forming
a Bow Knot



TURK'S HEAD

as a

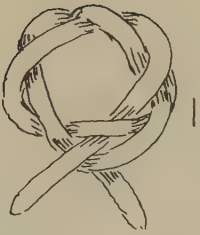
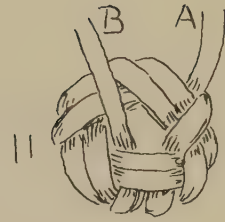
BUTTON

Fig. I- Turk's Head.

Fig. II- The strands
are doubleFig. III
End A carried down through
the Knot

Top of knot



Fig. V

A and B' are crowned
and are passed up through
the centre of the crown
coming out
alongside of B-B''
All ends are cut off except
one loop

Fig. VI

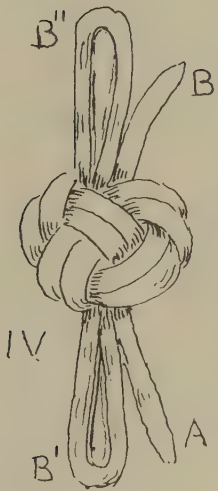
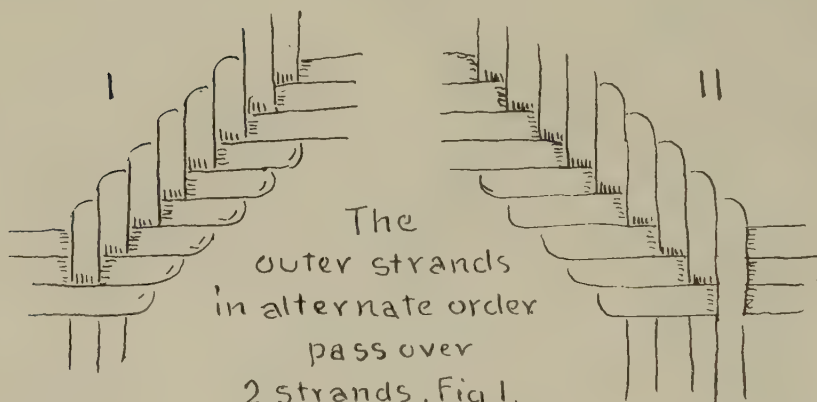


Fig. IV
End B is carried down
and back through
the Knot
forming two loops
B' and B''

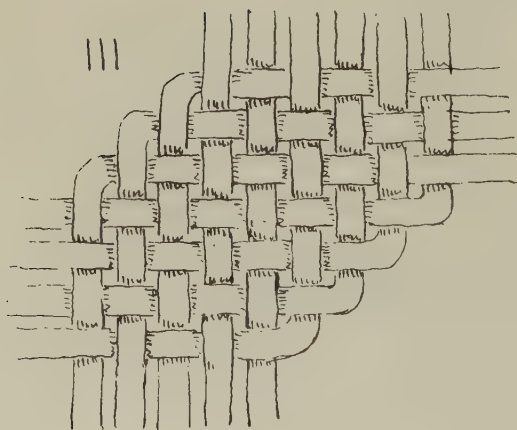


SENNIT

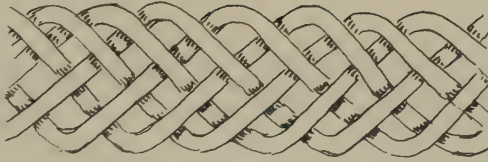
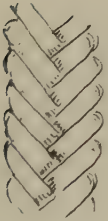
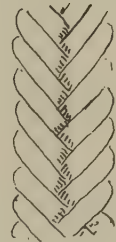
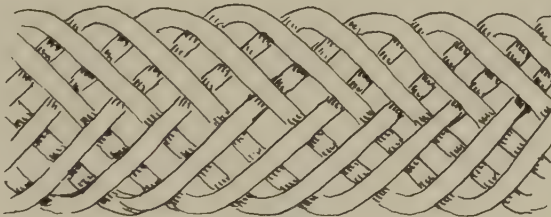
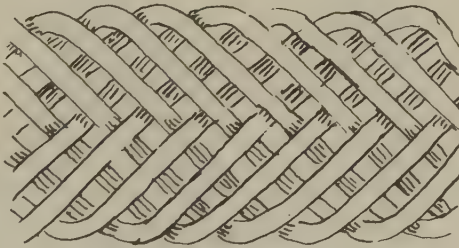
Plaiting with an uneven
number
of strands



The
outer strands
in alternate order
pass over
2 strands, Fig 1,
3 strands, Fig 2,
(or any convenient number)
meeting in a
"herring-bone" central line

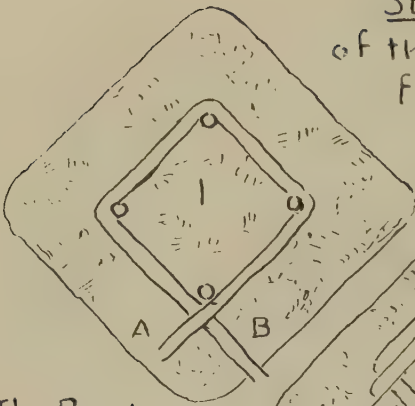
FRENCH SENNIT

The strands
in
this method
may be
odd or even
in number

SENNITOf Five StrandsOf Seven StrandsOf Nine Strands

SENNIT

of three Strands
forming
a Ring



The Ring
may be tied
around 4, 6, 8,
or
any even number of
pins

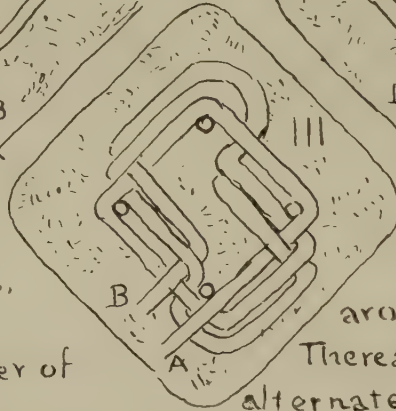


Fig. I
Begin at A.
Carry the line A B
around outside of pins
Thereafter the line lies
alternately outside and
inside of the pins - Fig. II, III

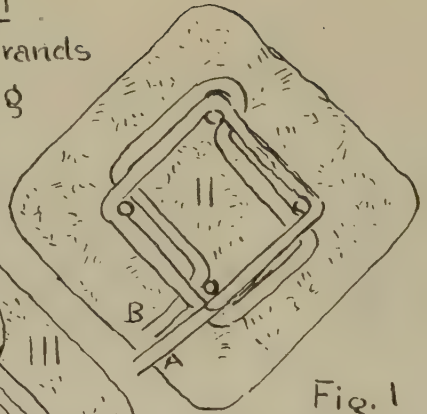


Fig. IV
The strands of
Fig. III
are thrown over
a post,
The strands
may be
doubled
or
tripled

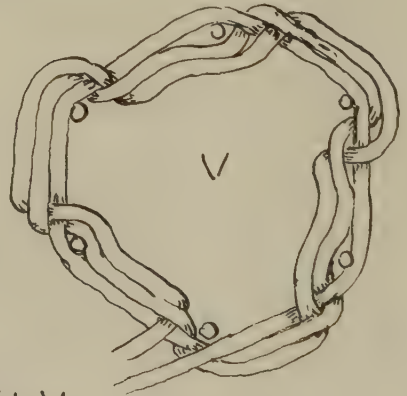
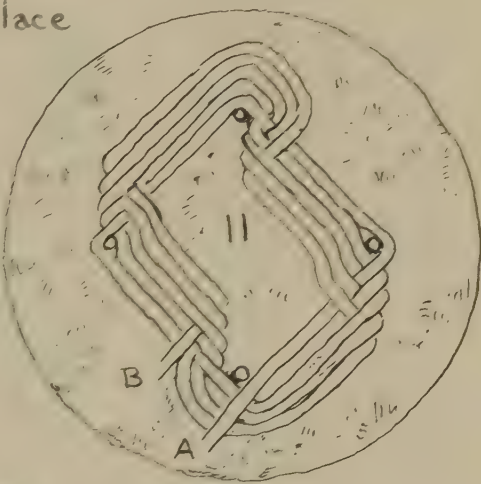
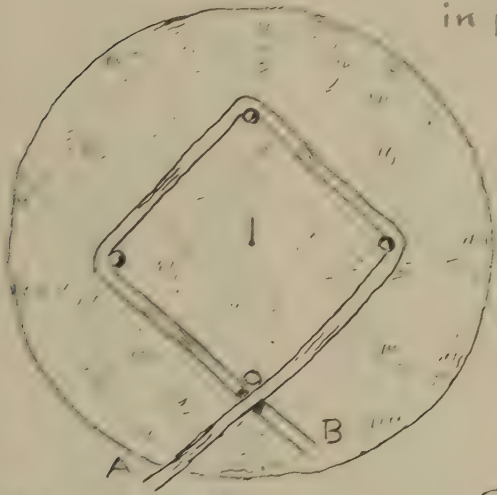


Fig. V
is the same Sennit
tied around six pins.

SENNIT

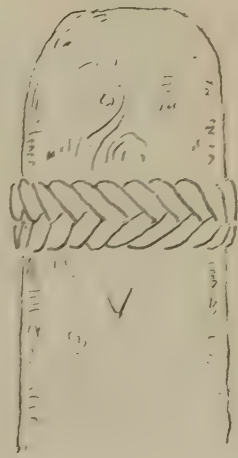
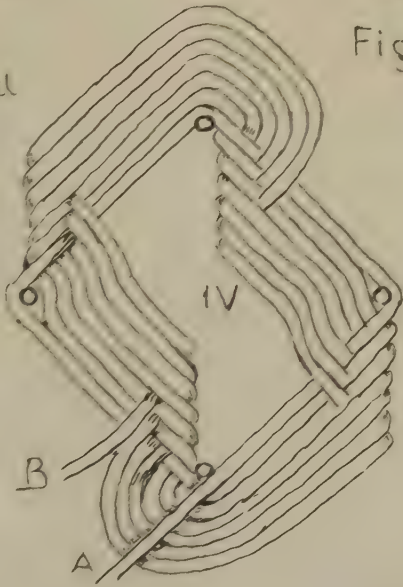
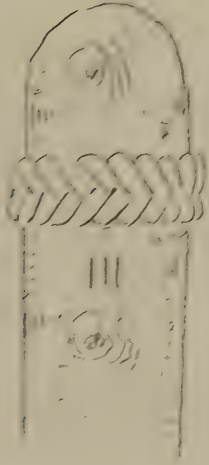
71

of Five and Seven Strands forming Rings
In addition to the four fixed pins, others are needed to
hold the work
in place

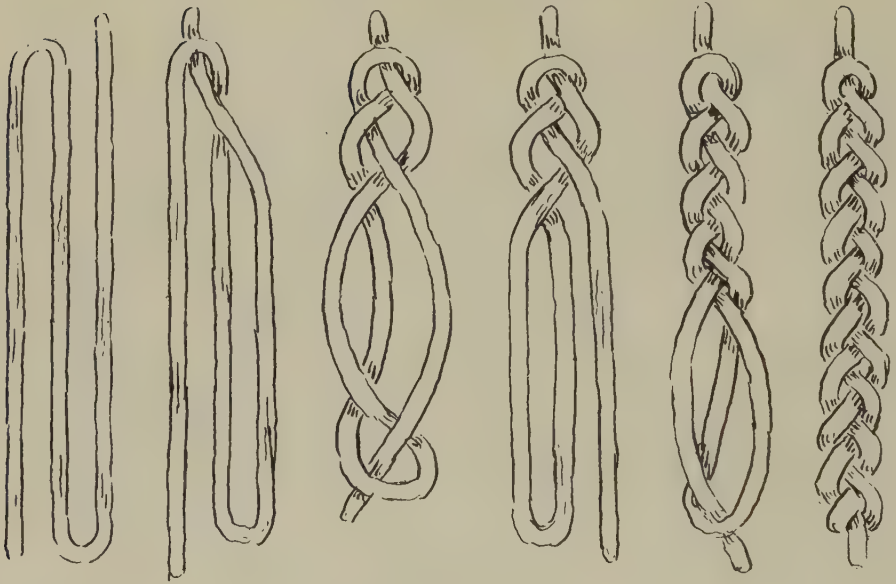


Figs. I-II-III
Five-strand
Sennit

Figs. I-IV-V
Seven-Strand
Sennit



THREE-STRAND SENNTS tied with one line



Overhand Knot

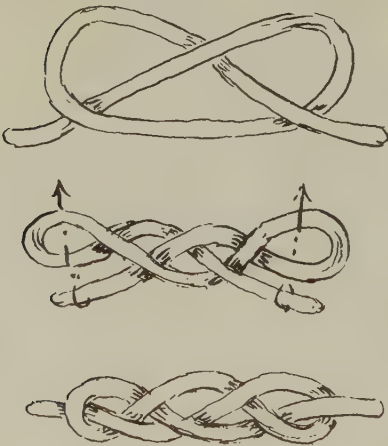
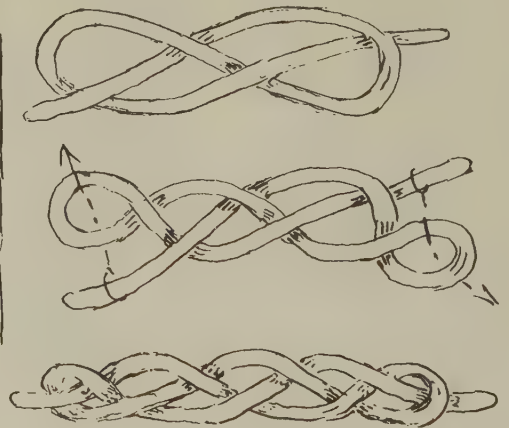


Figure of Eight Knot



TRIANGULAR BRAID OF TWO STRANDS

Fig. I A loop C is formed by tying an Overhand Knot with the bight of strand A

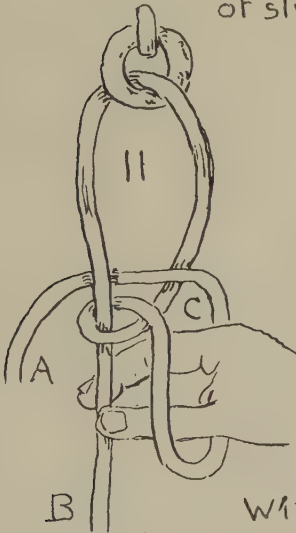


Fig II - With the fingers through the loop C seize B, pull it through the loop C, at the same time pull A thus forming a new Loop D

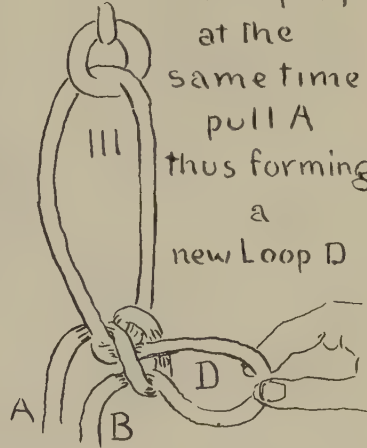
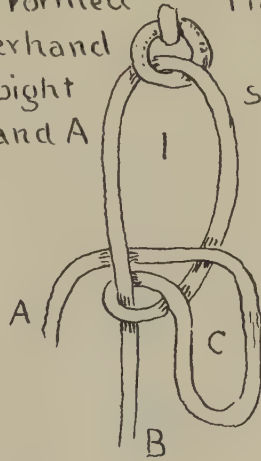
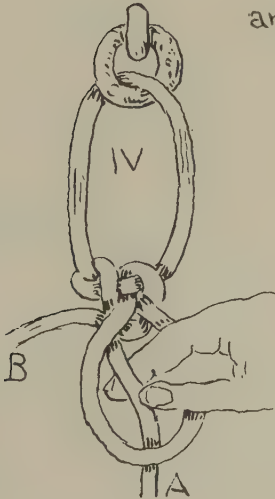


Fig. IV

With the fingers through D form a new Loop with the bight of A, and by pulling B, and so on, forming loops alternately with the two strands



The three faces of the Braid



SINGLE STRAND SQUARE BRAID

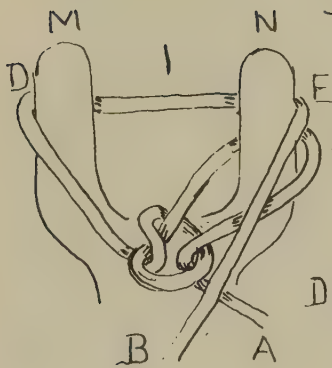


Fig I
Arrangement
of the cord AB
on the fork

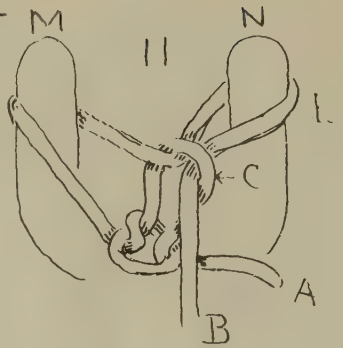


Fig II
Pass the Slipnoose C
over E & N

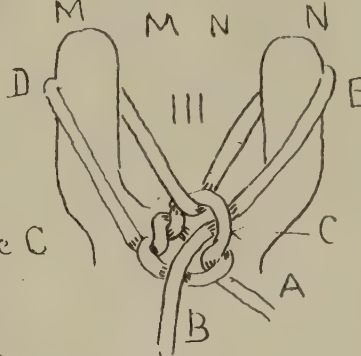
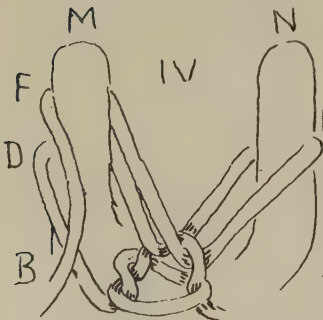


Fig III
Draw C taut with A
(A is no longer
used). N



The braid begins
Fig IV

Pass B around M
at F

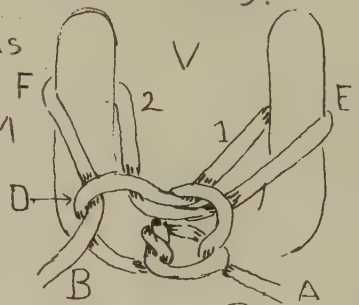


Fig V
Pass D over F & M

Pull D taut First with 1 - next with 2 - Then with B

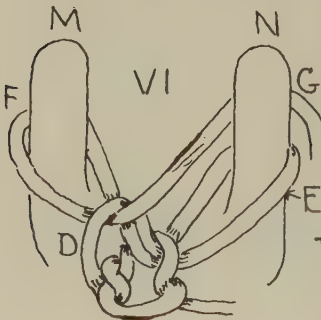
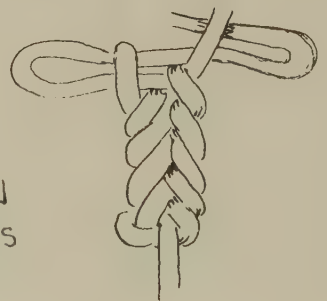


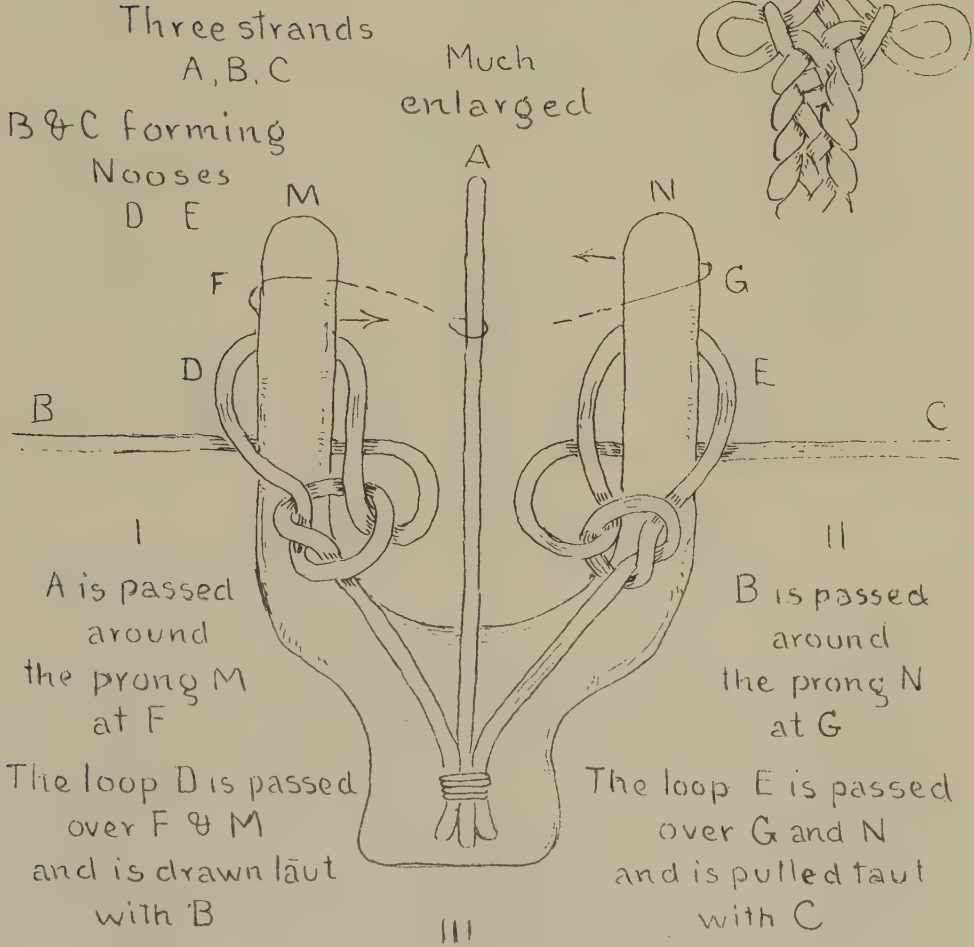
Fig VI

Pass B around N
at G

Pass E over G & N
Tighten with 3 pulls
and so on



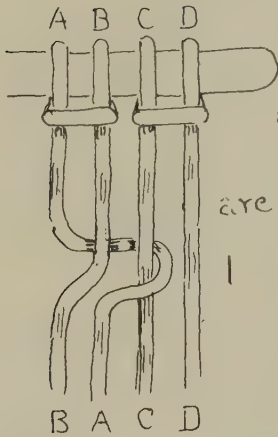
BRAID OF THREE STRANDS



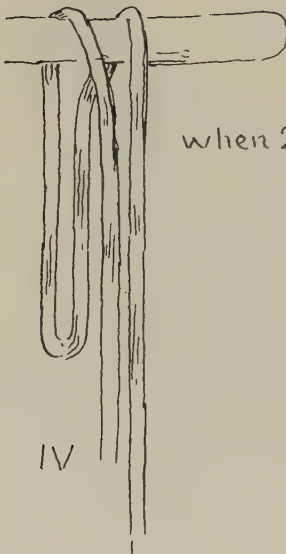
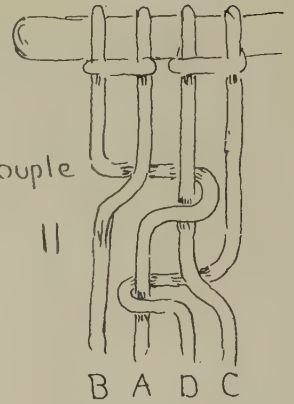
C is then passed around M etc.

The strand that pulls its loop taut forms the next
new loop

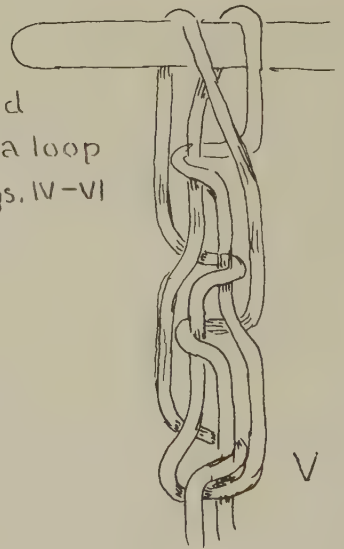
The arrows at F & G indicate the lay of the
strands that form the new loops.

FOUR-STRAND ROUND BRAID

The strands A+B
are always the left hand,
the strands C+D
are always the right hand, couple

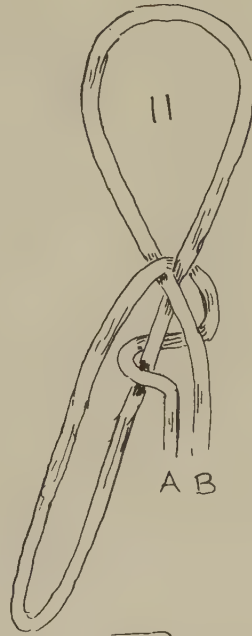
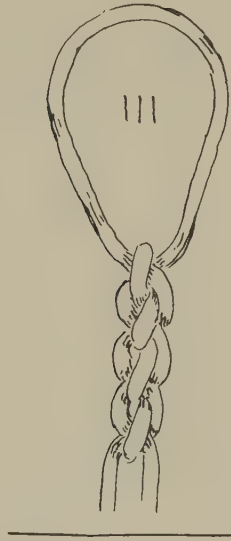
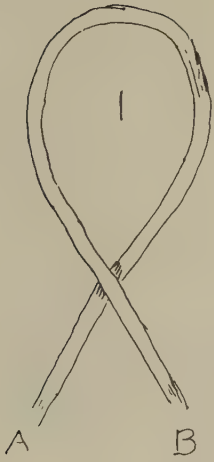


The Braid can be tied
when 2 of the strands form a loop
Figs. IV-VI



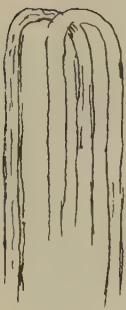
ROUND BRAID

tied with a doubled strand

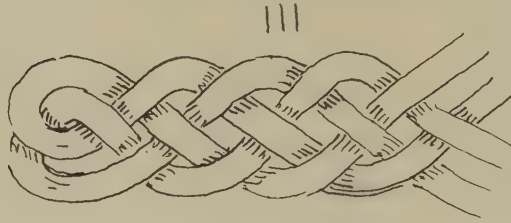


With leather straps

FOUR-STRAND FLAT BRAID

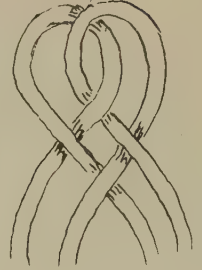


I

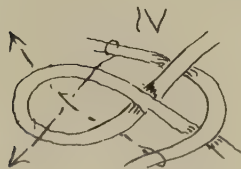


III

II

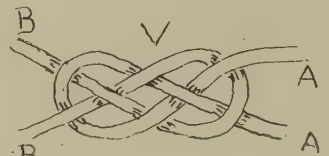


Joining two Strands
A and B



IV

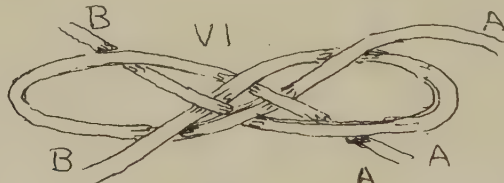
Figs. IV, V
the



V

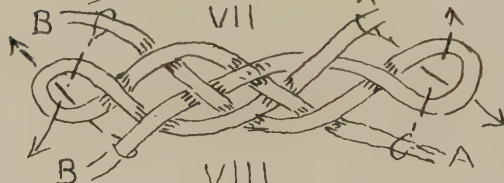
Carrick Bend B

The Braid can be extended indefinitely at each
end or at both ends Figs. VI, VII, VIII



VI

Pull
the bights
of
Fig. V



VII

To form
the
Fig. VI



VIII

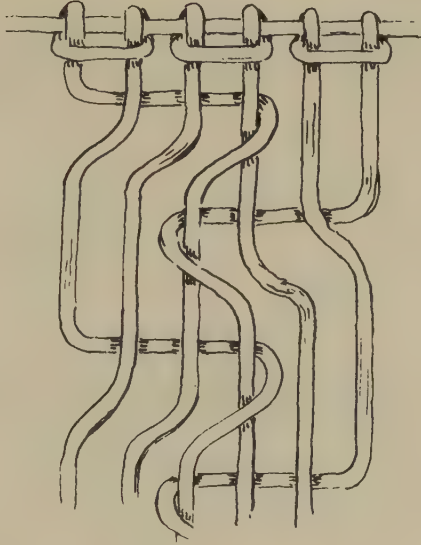


A SIX-STRAND AND EIGHT-STRAND BRAID

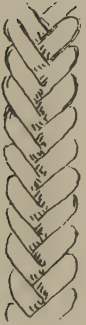
Half Round
Braid



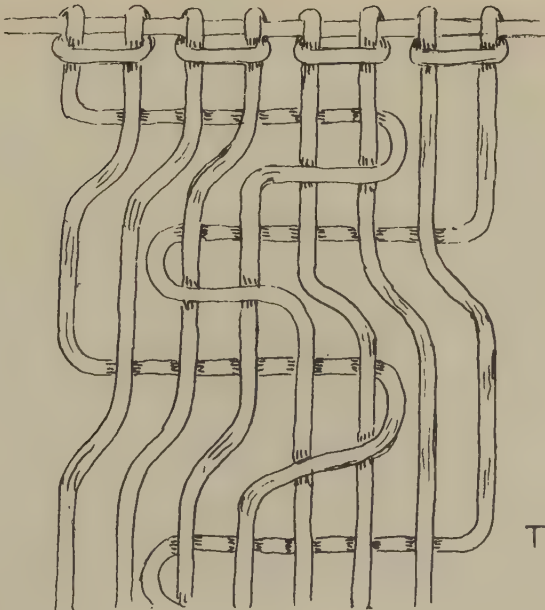
Front



Back



Square
Braid

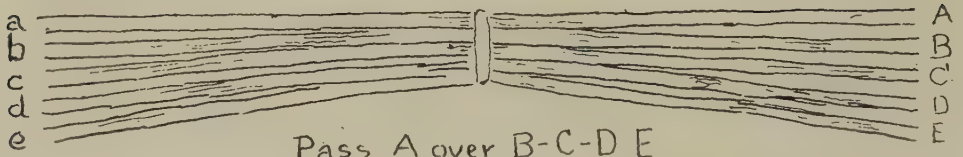


The four sides
alike



SQUARE BRAID

of ten strands

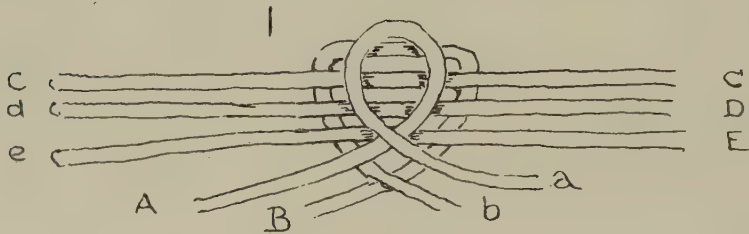


Pass A over B-C-D E

Pass a over b-c-d-e-A

Pass b under c-d-e-A

Pass B under C-D-E-a-b



Pass C over D-E-a-b

Pass d under e-A-B-C

Pass c over d-e-A-B-C

Pass D under E-a-b-c-d

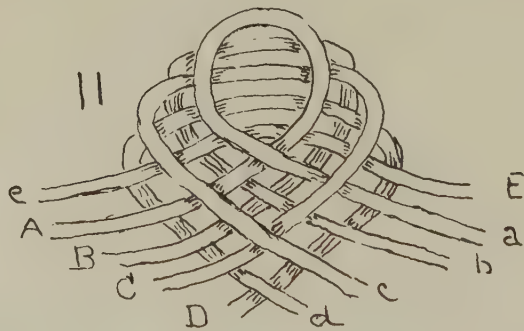
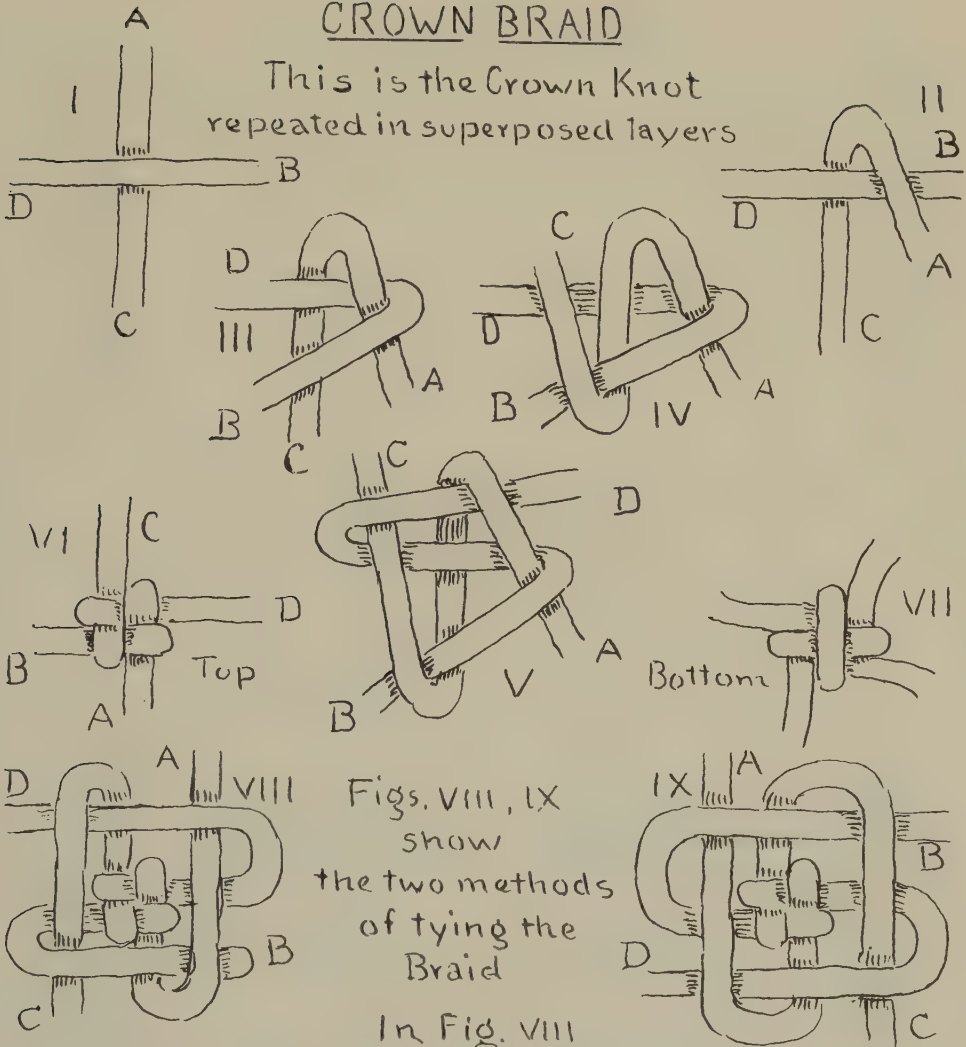


Fig. II repeats the method of Fig. I and its repetition forms the Braid.

CROWN BRAID

This is the Crown Knot
repeated in superposed layers



Figs. VIII, IX
show
the two methods
of tying the
Braid

In Fig. VIII
each strand is laid to & fro
upon itself

reversing, in the alternate layers, the order of rotation

In Fig. IX

the order of rotation is always the same

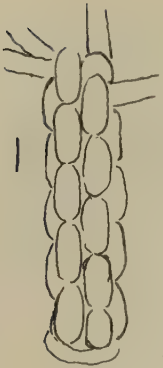
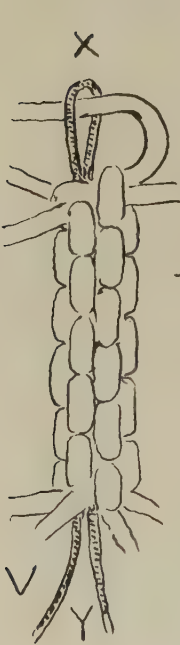
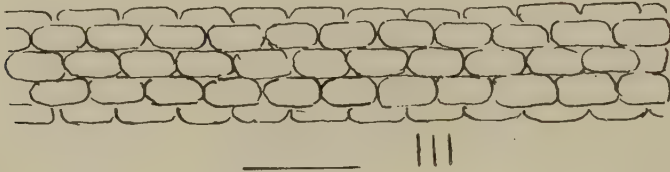
CROWN BRAID

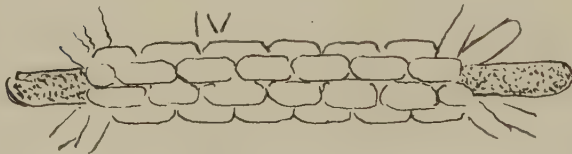
Fig. I
is the Braid tied by the method of
Fig. VIII on the last page



Fig. II
is the Braid tied by the method of
Fig. IX, on the last page

Six-Strand Braid

The Braid may be tied around
a Core, Fig. IV



The Core may be pulled out
Fig. V

and, with a copper wire X-Y,
the strands

at each end of the Braid
can be drawn
through the centre, Fig. VI, so as
to form
a neat finish at both ends



CHAIN BRAID

Single

tied with the
Bight
A



Double

tied with the
End
B



The
single
Chain Braid
is the fundamental Knot
in Crochet & Knitting

FALSE BRAIDin
Leather

Splicing 2 straps



The leather straps
while wet
are pulled in alternate order
through
the slots



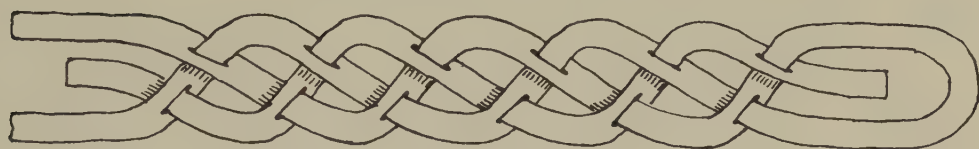
II



Strap & Buckle

85 FALSE BRAID

Three straps may unite in a False Braid
as shown in Fig I



Four straps may also be combined as
shown in Fig II



The slits are cut one by one as the work progresses

The Braid will be square in cross section
when, with 2 straps, the width of the strap is twice
its thickness—with 3 straps, 3 times, & with
4 straps, 4 times the thickness.

The 3 methods may combine to form a Leash or Quirt



←--- 4 straps --- * --- 3 straps --- * --- 2 straps ---→

TRICK BRAID

Fig. I - Leather strap with two slits and three strands

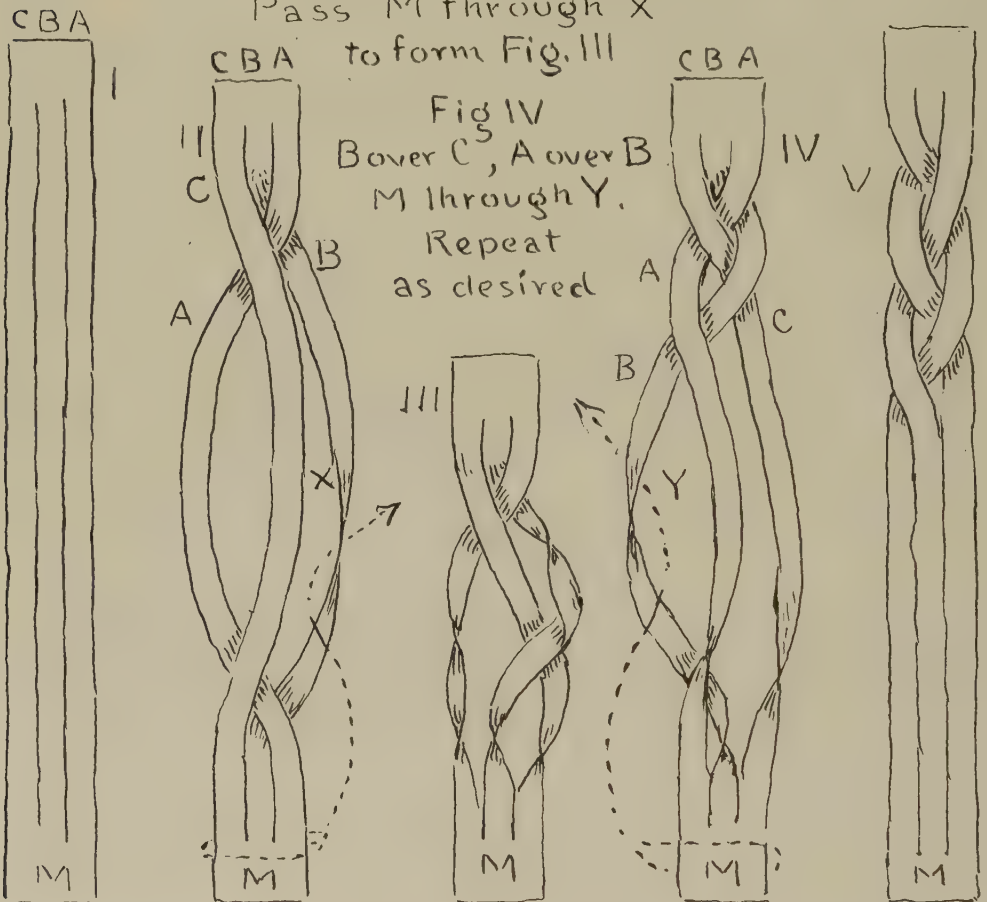
Fig. II - A over B and C over A

Pass M through X

CBA to form Fig. III

Fig IV
B over C, A over B

M through Y.

Repeat
as desired

VI

SAILORS KNOTS

REEVING
LINE

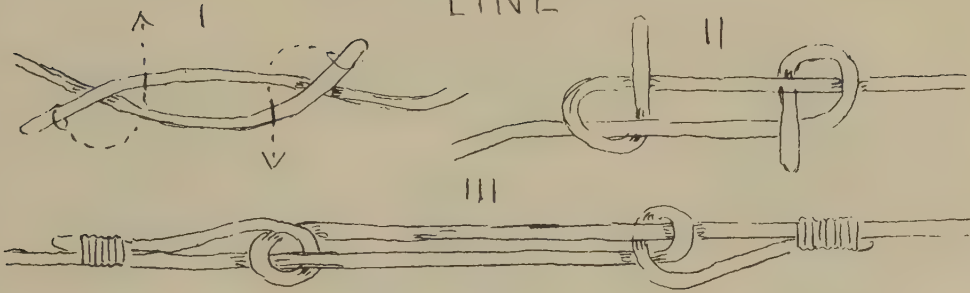
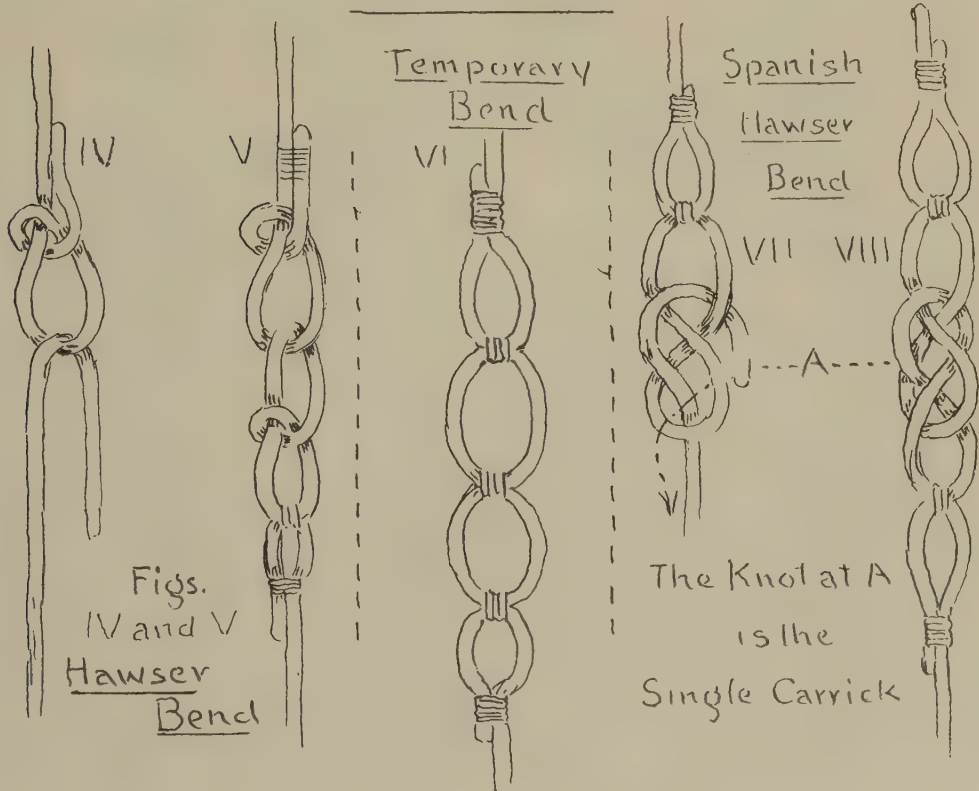


Fig. II is the Half Granny see page 30



Figs. IV and V
Hawser
Bend

Temporary
Bend

Spanish
Hawser
Bend

The Knot at A
is the
Single Carrick

HITCHES

Hook and Half Hitch

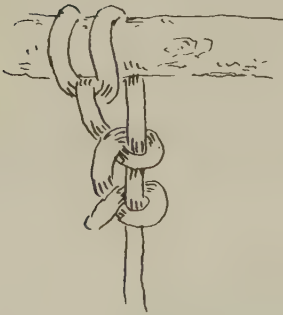


Figs. I, II
Blackwall

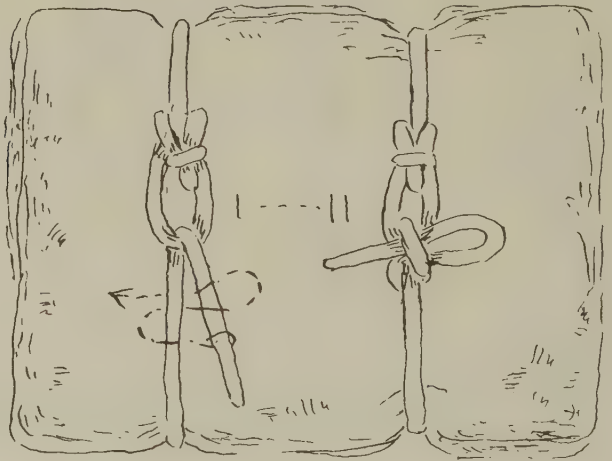


Drawing Knot
Bowline and Half Hitch

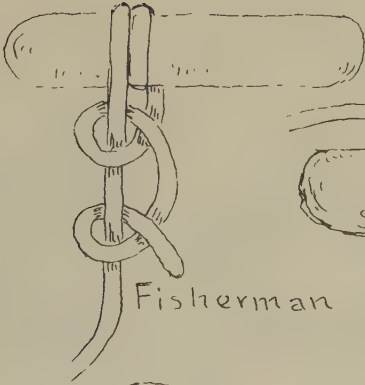
Slippery
Hitch



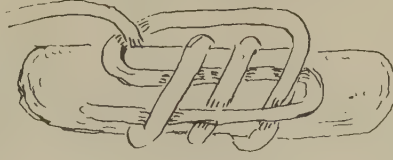
Backhanded Hitch



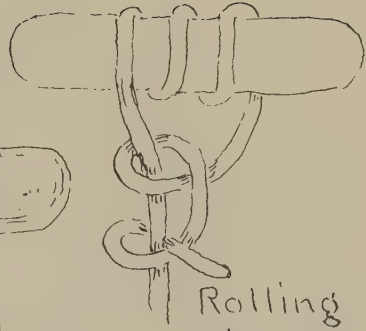
HITCHES



Fisherman

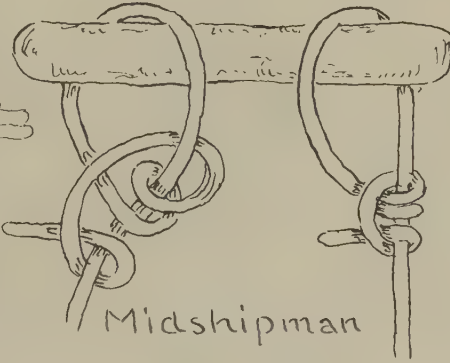
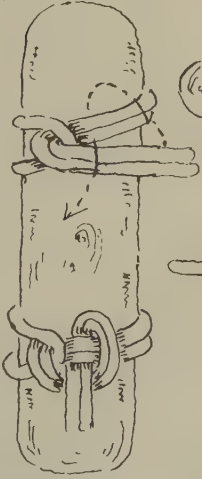


Top's
Halyard

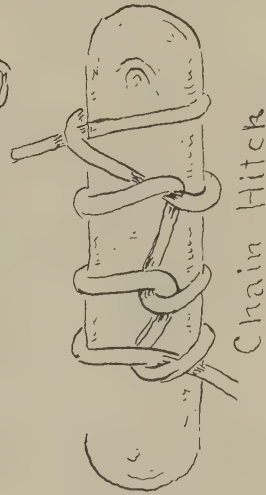


Rolling
Hitch

Lark's Head & Half Hitch

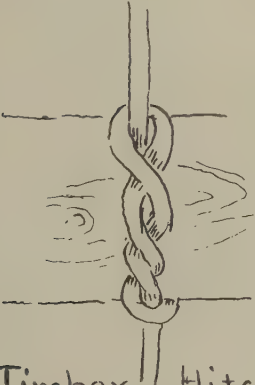


Midshipman

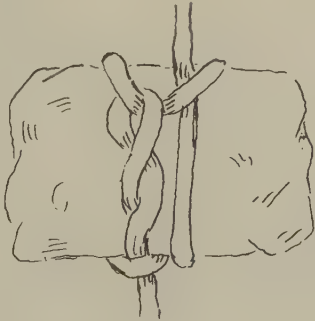


Chain Hitch

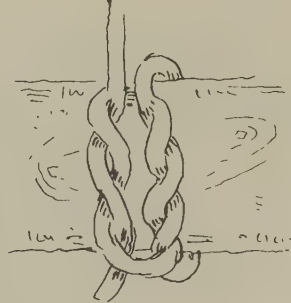
Twists



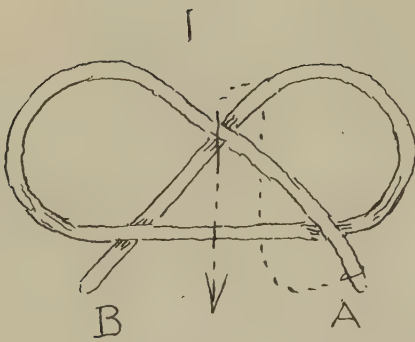
Timber Hitch



Killick Hitch



Double Twist

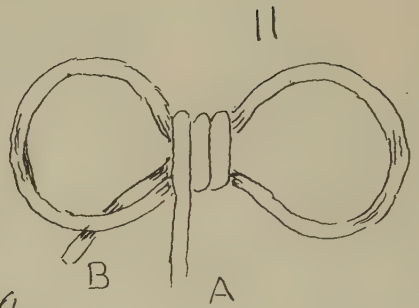
CATSPAW

Form two
Loops
as
in Fig. I

Single



Throw the two loops onto the hook



Pass
the strand A
2 or 3
times around
the loops

The two
fore fingers form
the two loops
C & D



Double

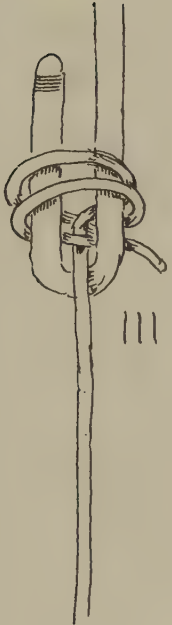
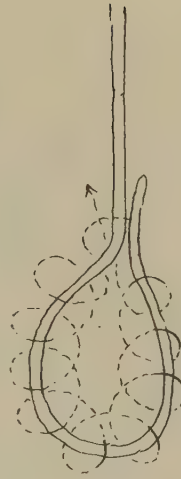


The line
is twisted by turning
the fingers two or three
times

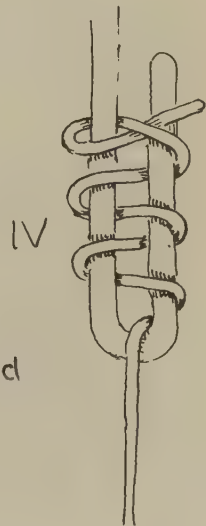


HEAVING LINE

Figs. I, II
Terminal Knot
of the
Heaving Line



Figs III, IV
Bends
of the Heaving Line and
Hawser



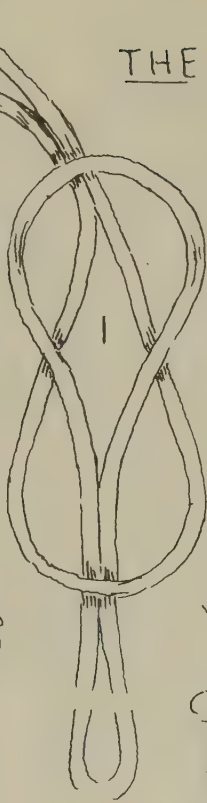
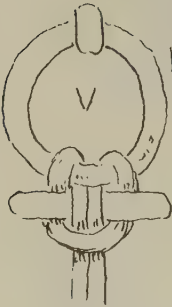
THE TOGGLE

Figs. I, II, III

Strop
Toggle



Toggle & Lark



Eye Toggle

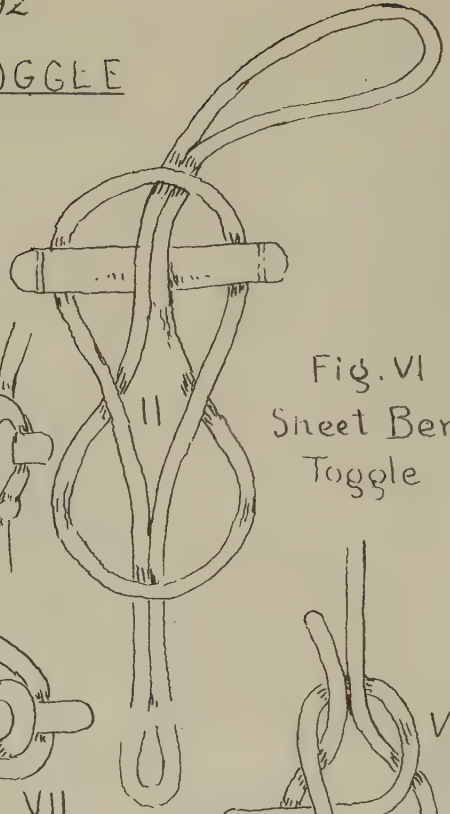
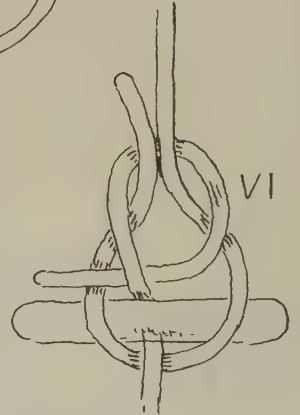
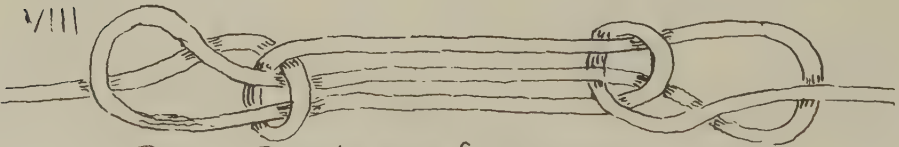


Fig. VI
Sheet Bend
Toggle

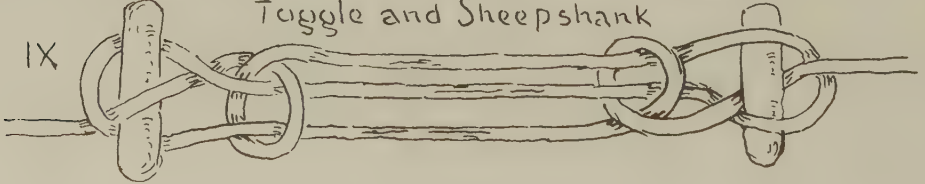


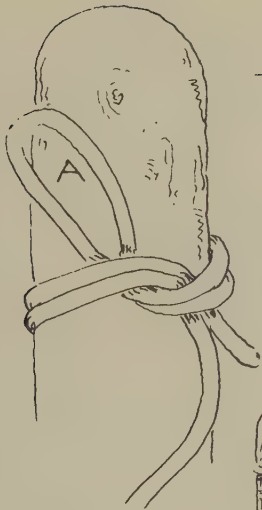
VIII



Toggle and Sheepshank

IX

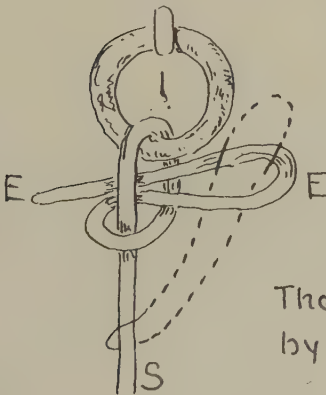


MOORINGOver a Post

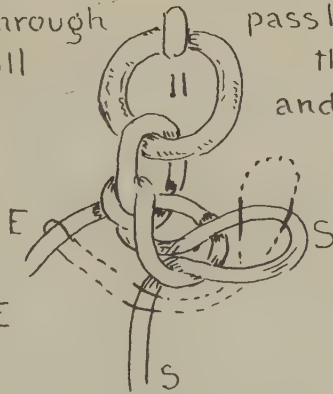
Tie an Overhand Knot on
the post
with the bight of the
line
and throw the
loop A over the post

Through a Ring

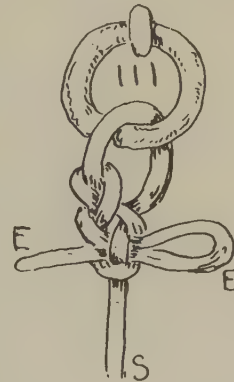
In Fig I
pass the bight of S through
the loop E and pull
the end E



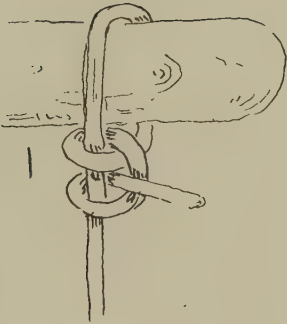
In Fig II
pass bight of E through
the loop S
and pull the end S



The knot is released
by pulling the end E
of III

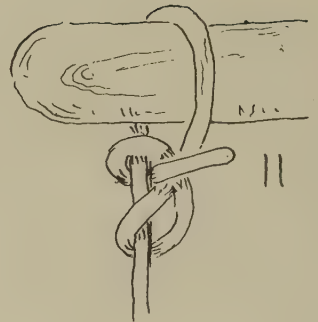


MOORING



I

Figs I, II
Two
Half Hitches



II

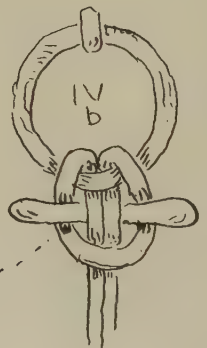


III

Lark's Head



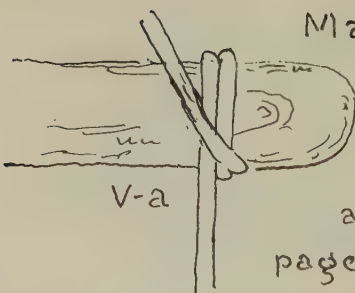
IV
a



IV
b

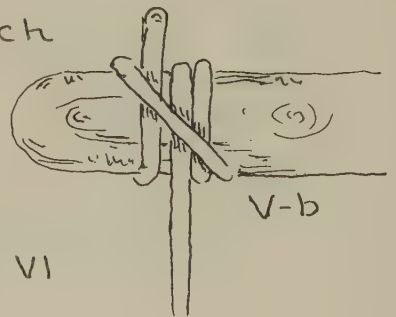
With
bight & toggle

Magnus Hitch

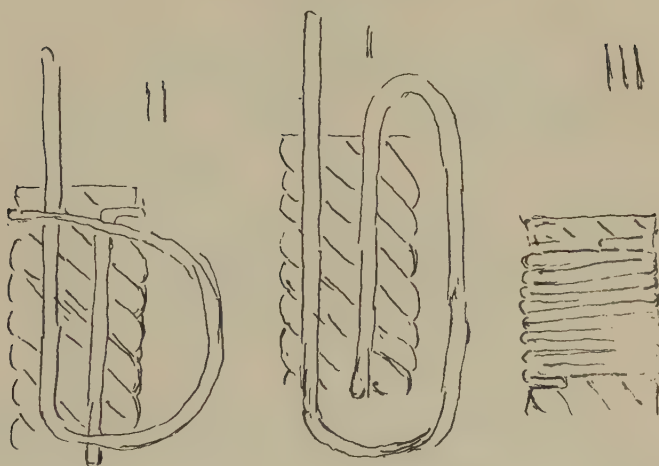
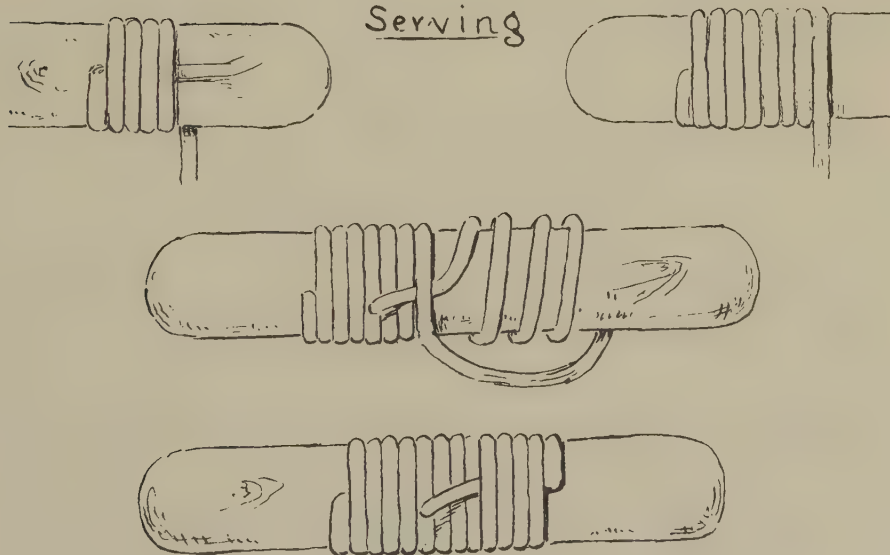


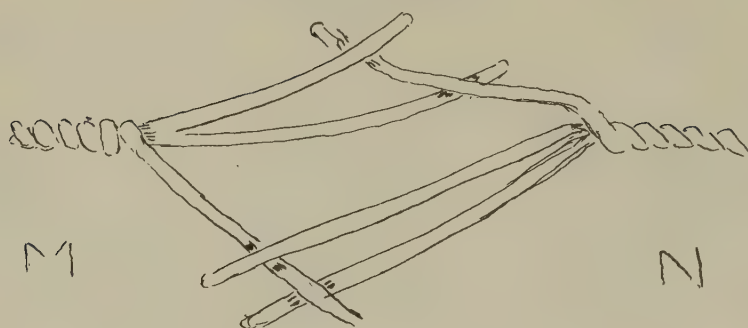
V-a

or
as shown on
page 8 — Figure VI

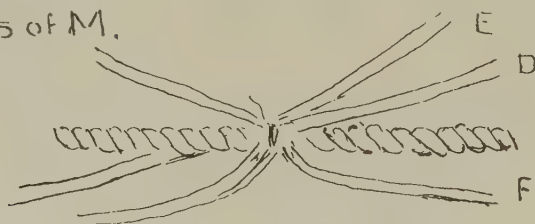


V-b

WHIPPINGServing

SPLICING

Unlay 7 or 8 strands of the two ropes M and N to be spliced. Arrange them in such manner that each strand of M lies between two strands of N and each of N lies between two strands of M.

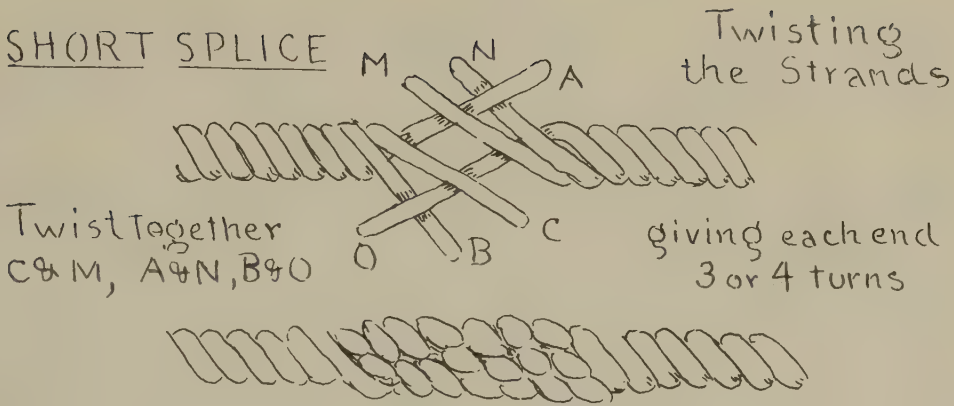


Push the six strands close together and bind them temporarily with twine

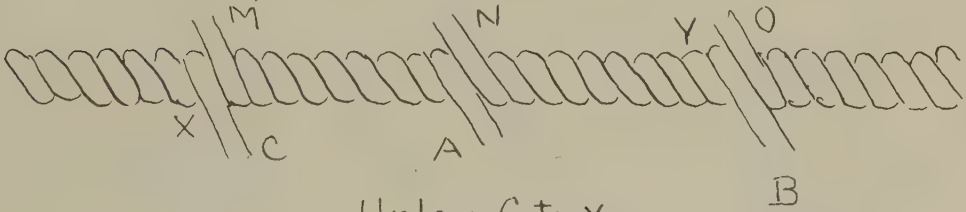
SHORT SPLICE

Braiding

Each strand passes over the next one and then under the second beyond.

SHORT SPLICELONG SPLICE

Marry the strands as shown above



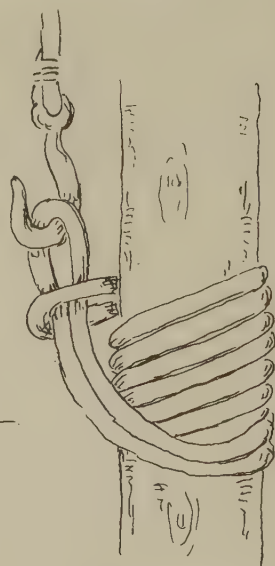
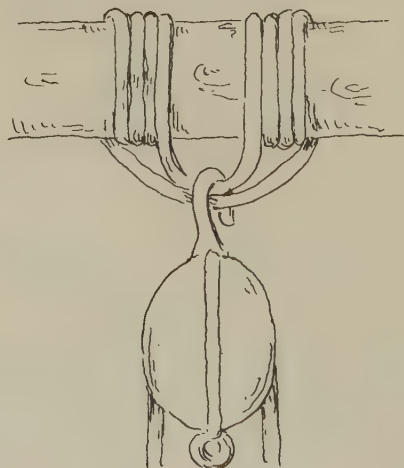
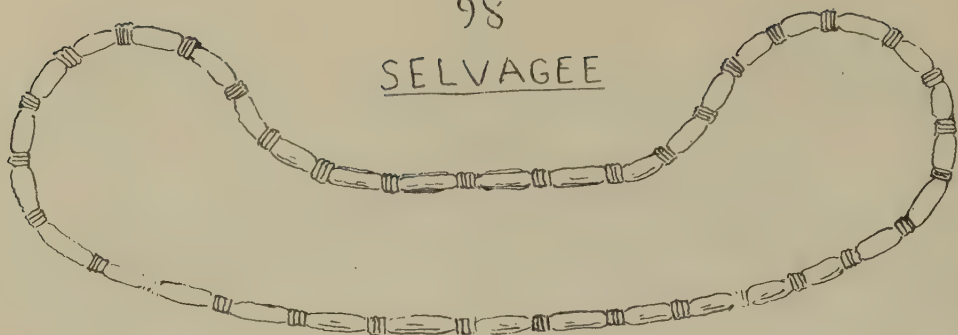
Unlay C to X
and replace it with M
& similarly
unlay O to Y
and replace it with B

Tie M & C together with an Overhand Knot
similarly tie together A & N and B & O
Taper the ends
and weave them into the strands of the rope



98

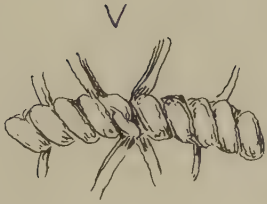
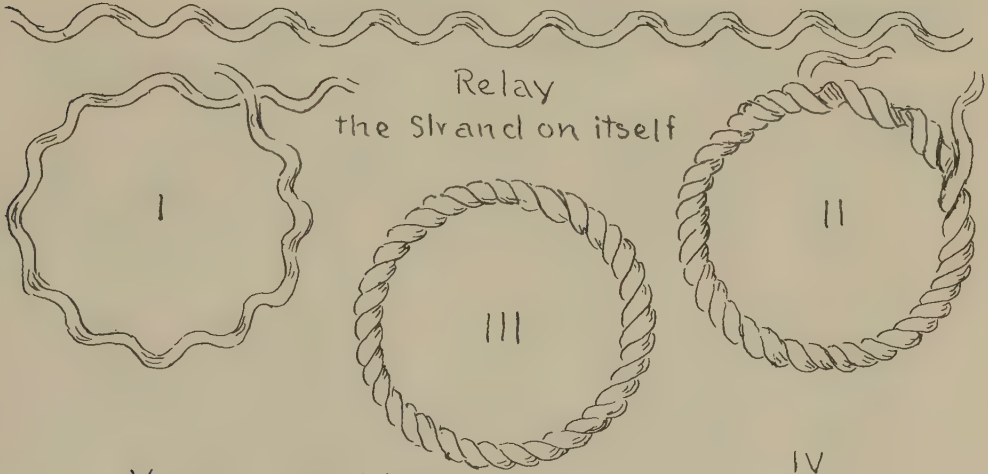
SELVAGEE



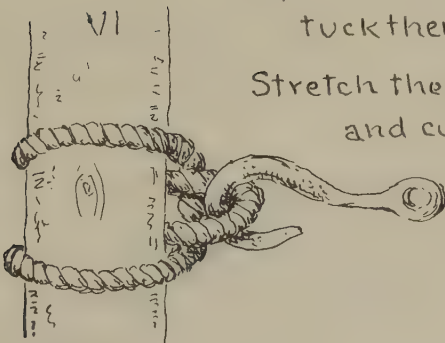
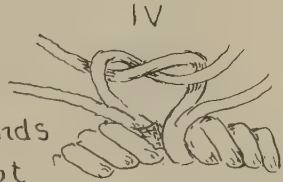
Lifting
Hitch

GROMMET

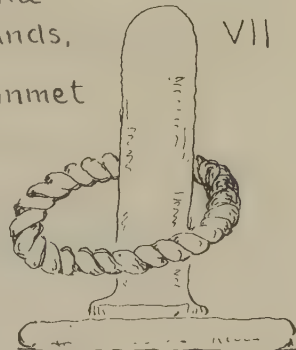
Carefully unlay a single strand of rope twelve times the diameter of the Grommet



To Finish
split the ends &
tie one half of the ends
in an Overhand Knot
Fig. IV



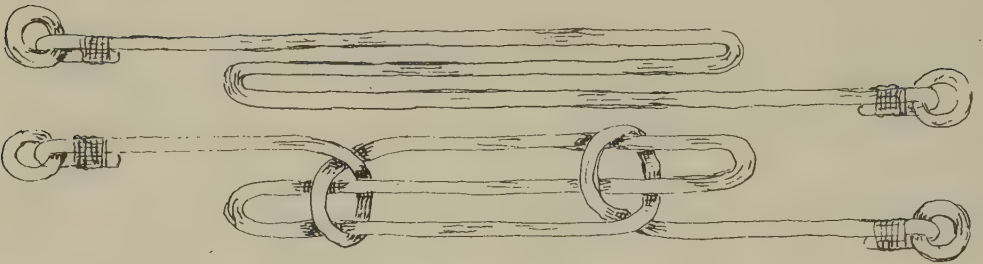
Split the ends again and
tuck them into the strands.
Stretch the finished Grommet
and cut away the
ends



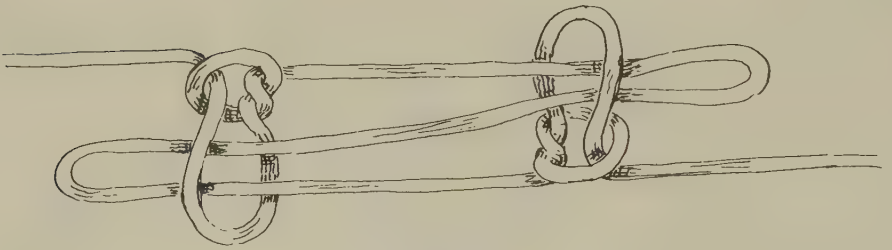
100

SHEEP SHANK

With both of the ends fast



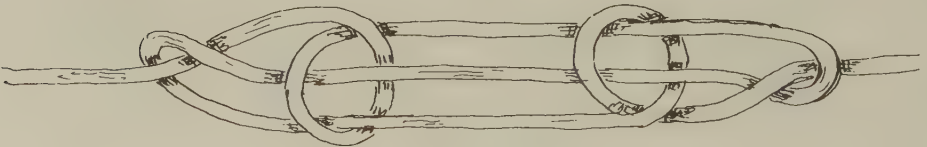
or



With the ends free



or



KNOTS
OF THE RANCH AND FARM

LASSO



THE HONDA or Hondo

An Eyelettied with two Overhand Knots



HALTERS

Loop with a
Honda
of two
Figure-of-8 knots

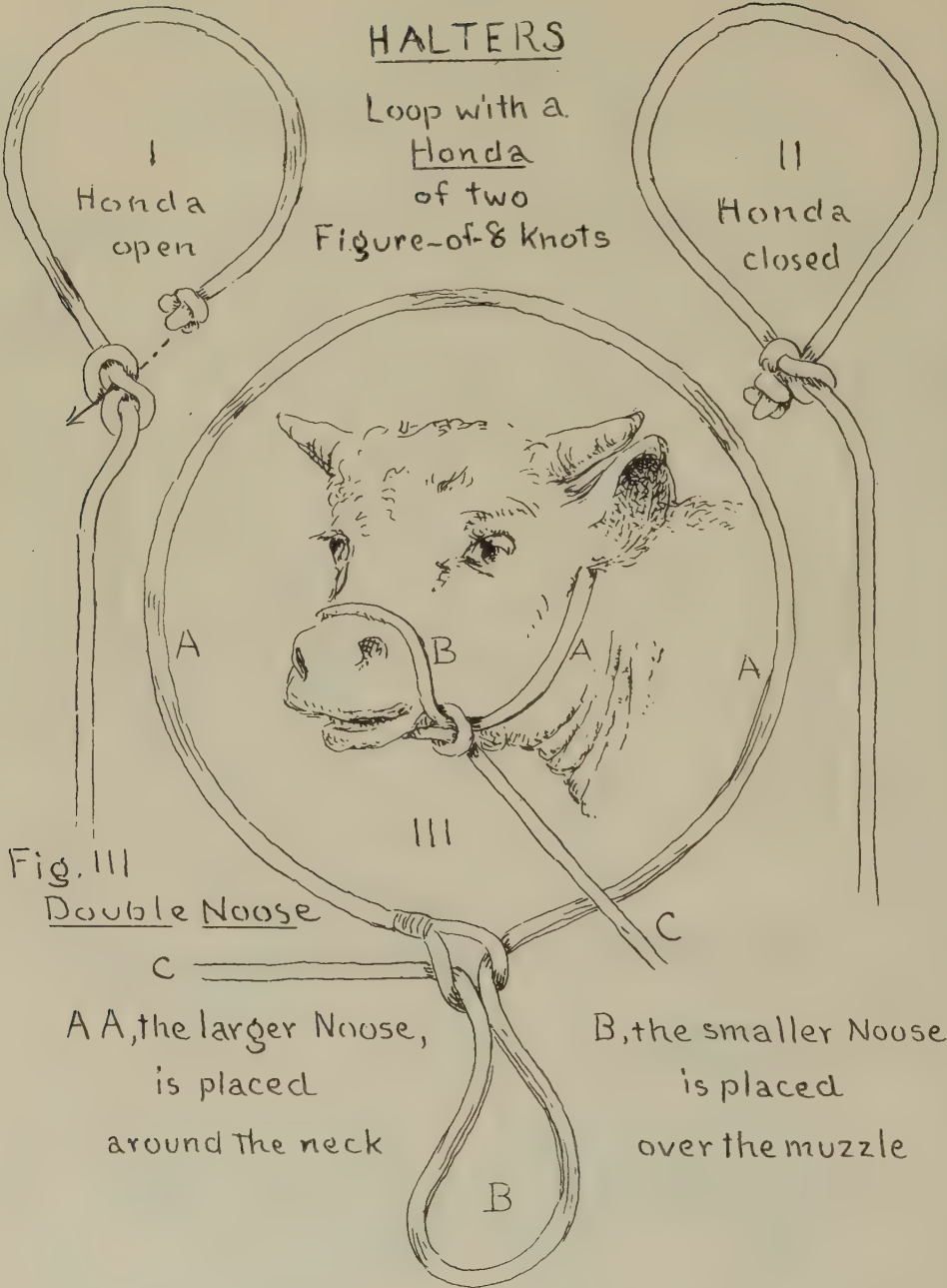


Fig. III

Double Noose

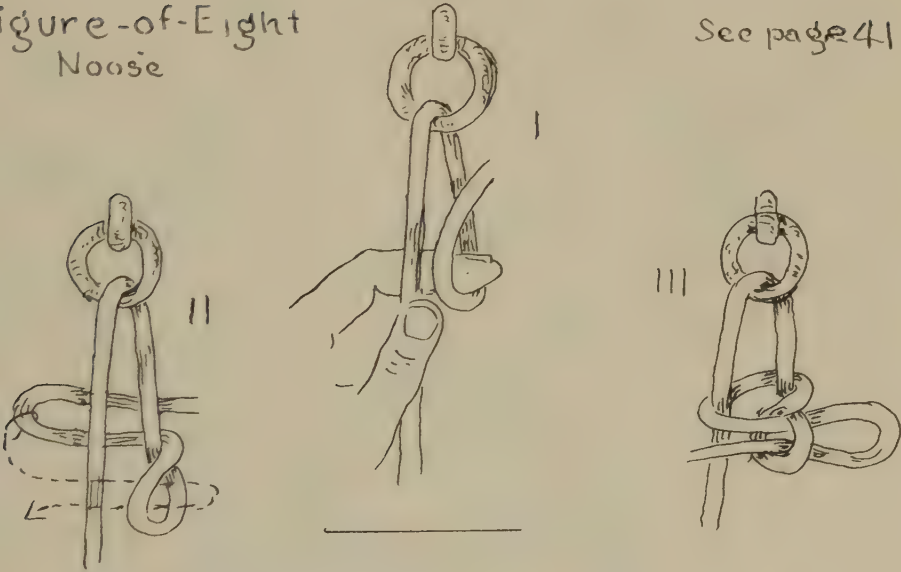
A A, the larger Noose,
is placed
around the neck

B, the smaller Noose,
is placed
over the muzzle

HALTER and MANGER KNOTS

Figure-of-Eight
Noose

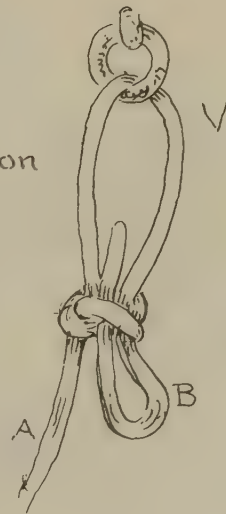
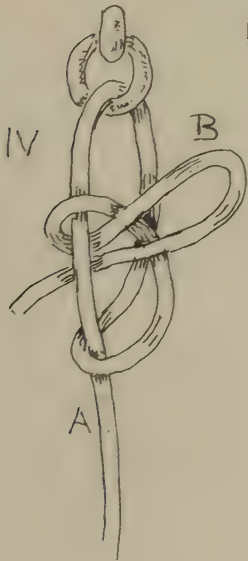
See page 41

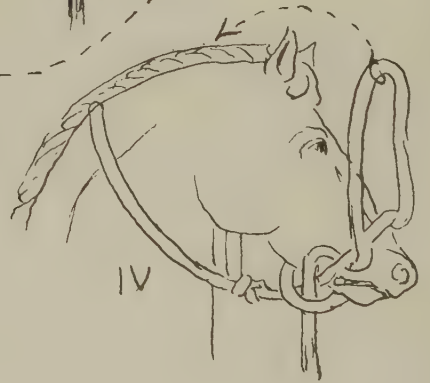
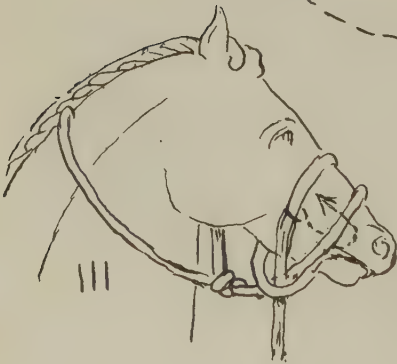
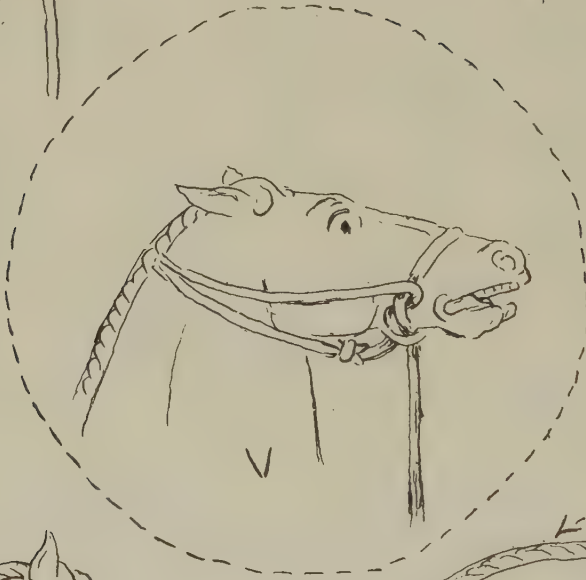
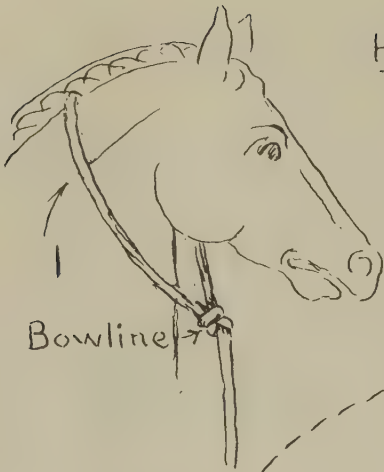


HACKAMORE TIE

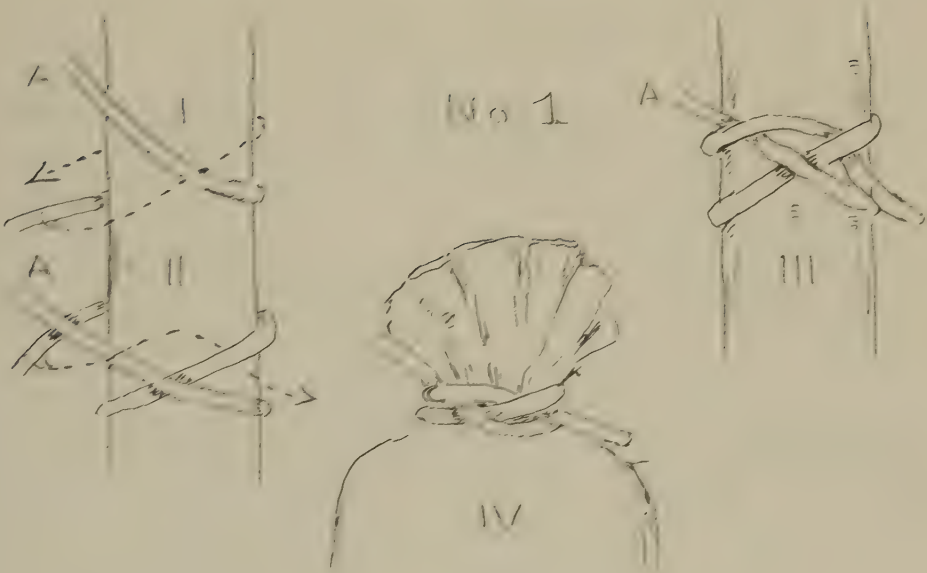
This is the
Buntline Hitch
which, by manipulation
of the parts A & B,
may be tied
as a Noose, Fig. IV
or
as a Loop, Fig. V

see page
34



HALTER

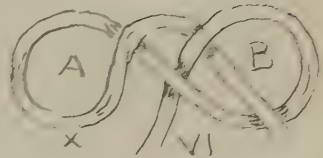
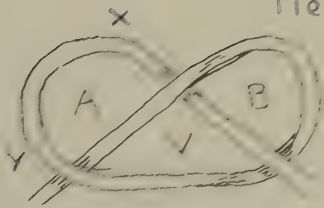
SACK KNOTS



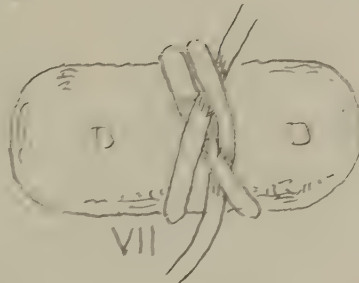
OR

Tie an Overhand Knot

Fig. V

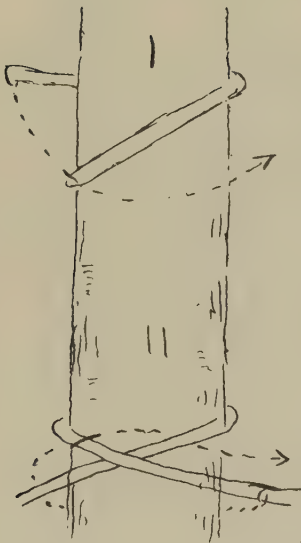


Turn A over
laying X onto Y
Fig. VI

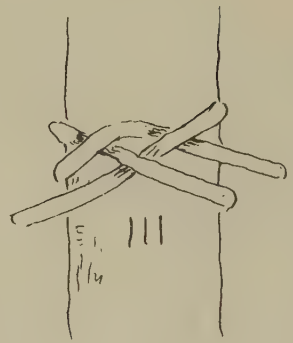


Lay
A under B
and slip
the two loops
onto D

SACK KNOTS



No. 2
Millers Knot

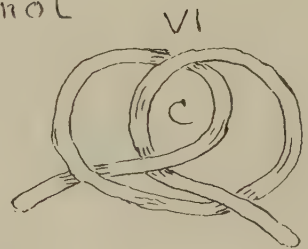
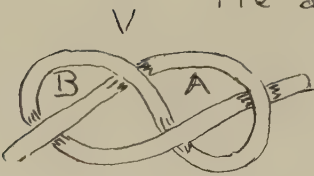


See
page 12



OR

Tie a Figure of 8 Knot
Fig. V

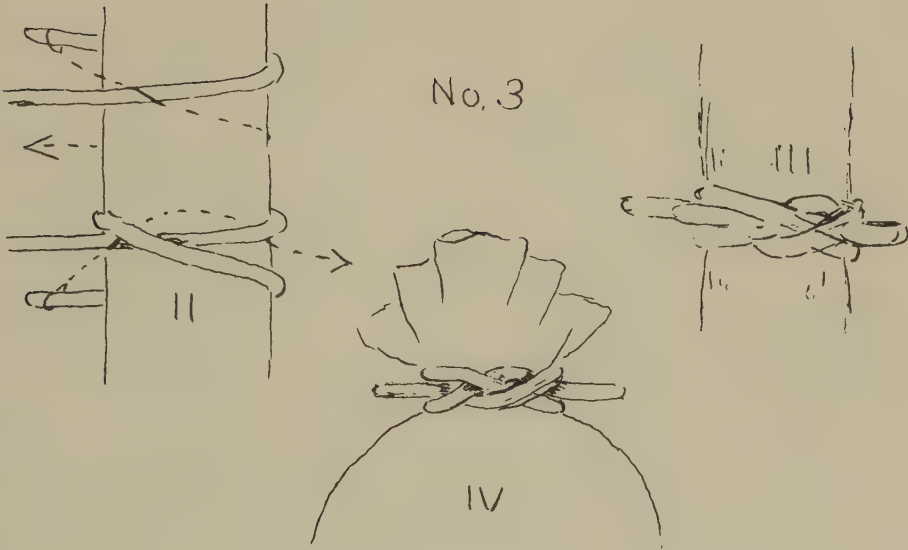


Lay the loop A
onto B
to
form the
Fig VI

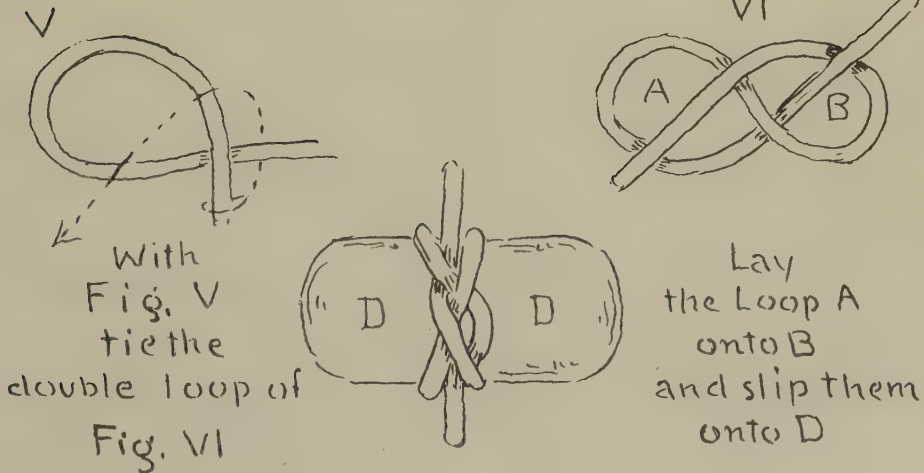


Slide
the loop C
onto D

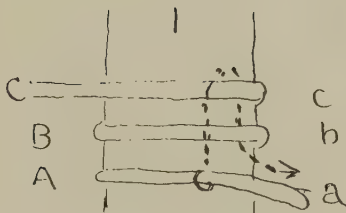
SACK KNOTS



OR

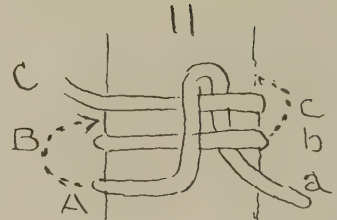


SACK KNOTS

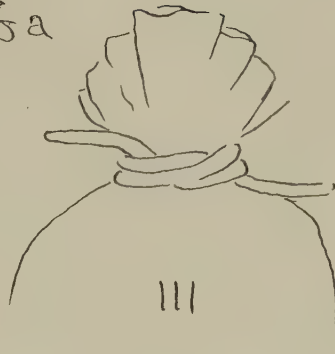


Pass A
over & around
B and C

No. 4



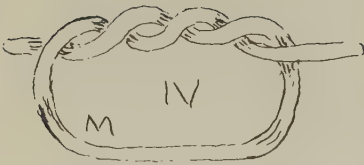
Lift A over B
and
b over c



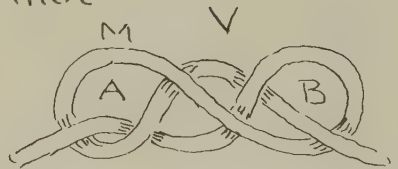
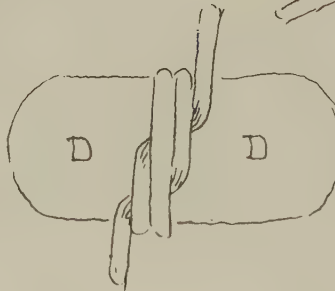
OR

Tie a Blood Knot

Fig. IV



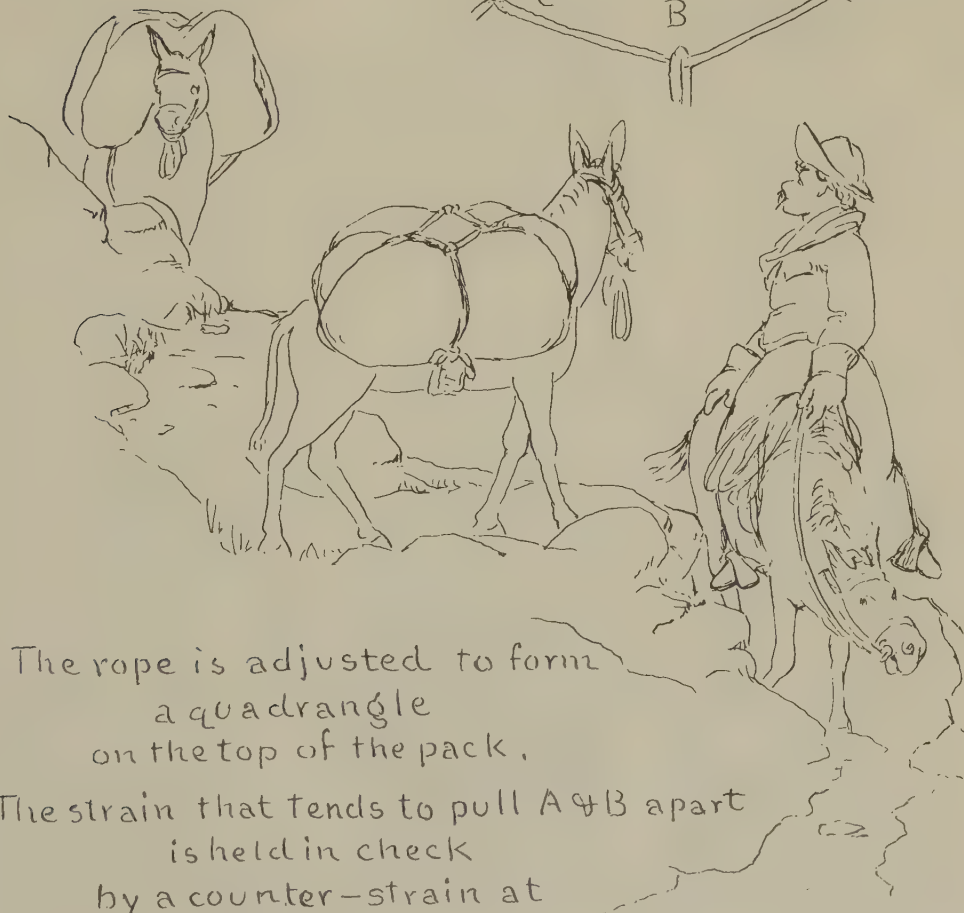
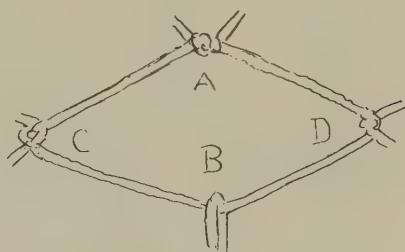
Turn M over
to form
two loops
A & B
Fig. V



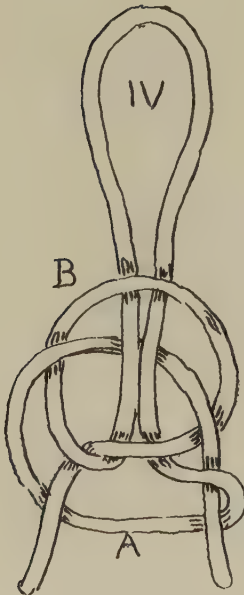
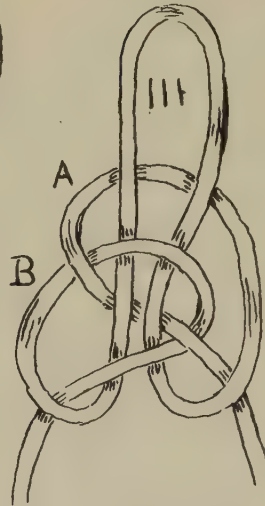
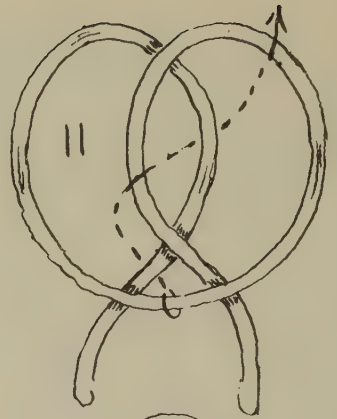
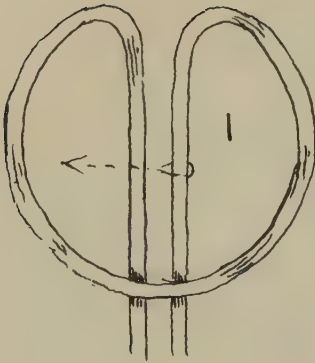
Lay
the loop A
under B
and
slip both onto
D

DIAMOND HITCH

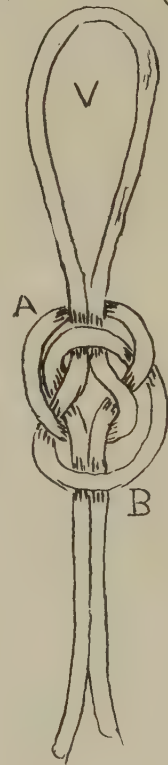
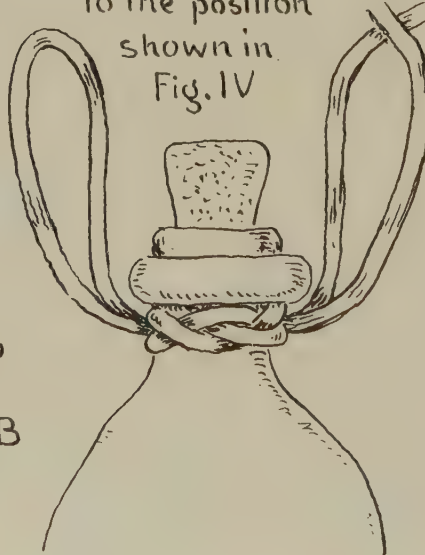
A compensating device for
securing the pack
on a horse



The rope is adjusted to form
a quadrangle
on the top of the pack.
The strain that tends to pull A & B apart
is held in check
by a counter-strain at
the points
C & D

JAR SLING

In Fig. III
pass the loop A down
to the position
shown in
Fig. IV



In Fig IV
pass the loop B
down to
the position of B
in
Fig. V

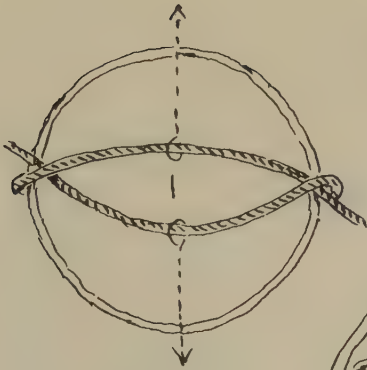
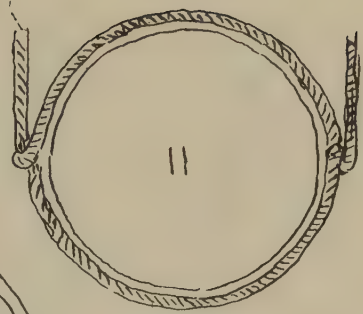
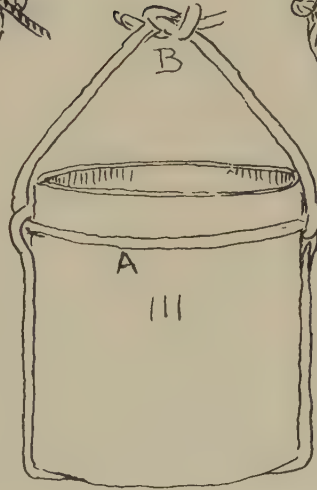
SLINGS

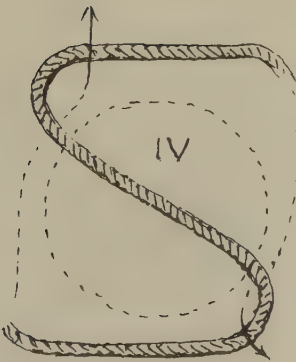
Fig. I
Tie an
Overhand Knot
vertically
around the can



Spread
the knot apart
and fit it
around the top
of the can
A-Fig. III

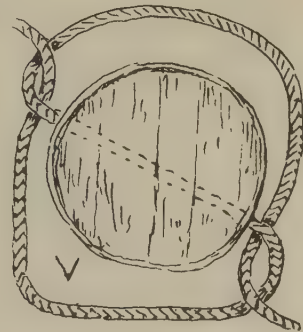
Tie the ends
together-B, Fig III

Arrange the rope
as in
Fig. IV



Barrel

Set the barrel
on the rope
Fig. V

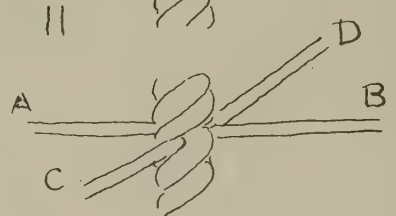
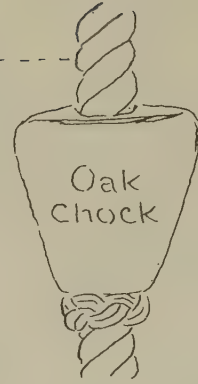
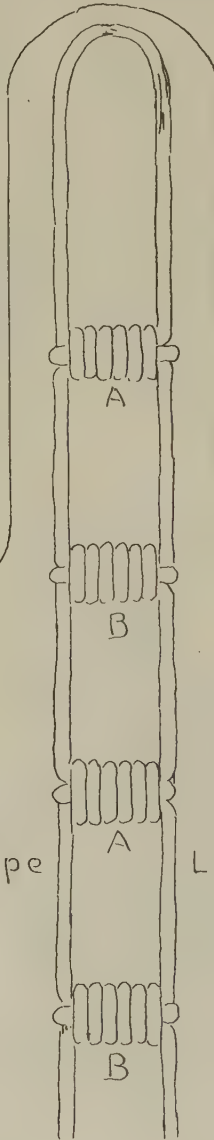


LADDERS

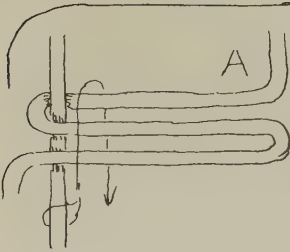
-----Single-rope Ladder-----



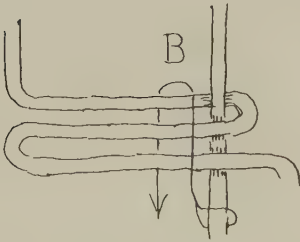
The Chocks are stopped
by a
4-strand Diamond - Fig. II



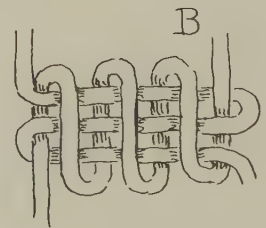
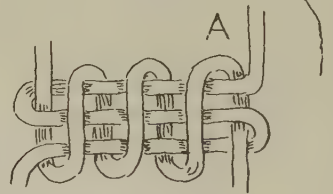
Pass 2 lines A-B, C-D
through the Rope



All-rope

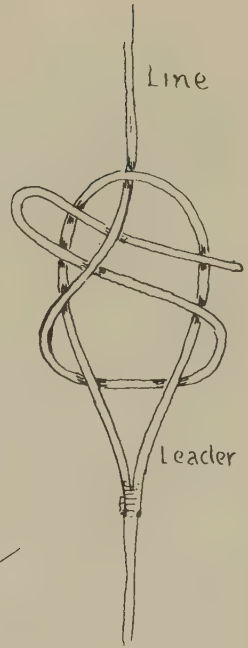
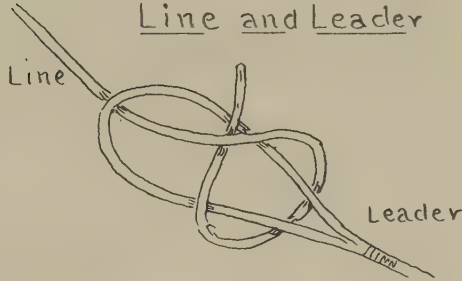


Ladder

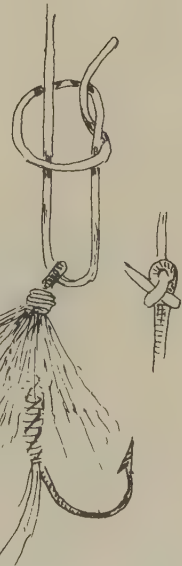
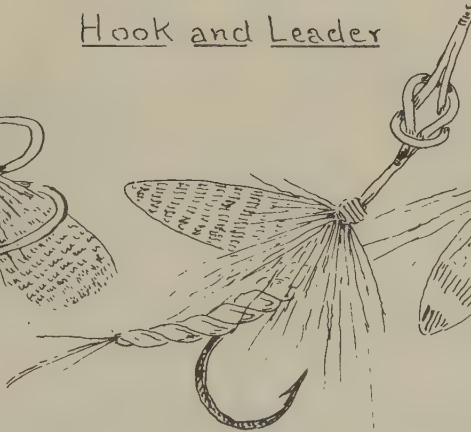


ANGLER'S KNOTS

Line and Leader

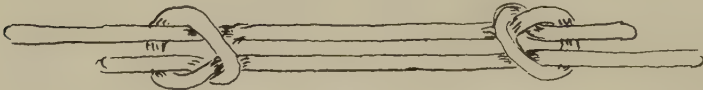


Hook and Leader



TYING LEADERSBarrel
Knot

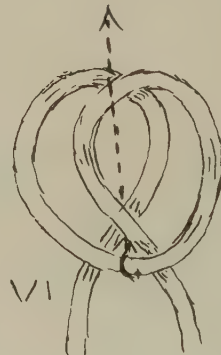
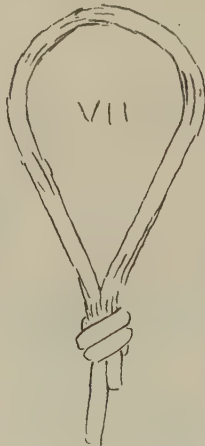
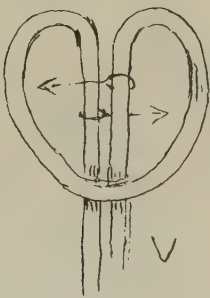
I

Water Knot

II

Water Loop

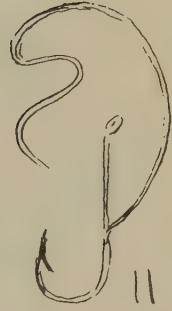
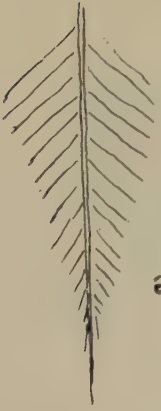
May be tied as in Figs. III, IV, VII,
or as in Figs. V, VI, VII



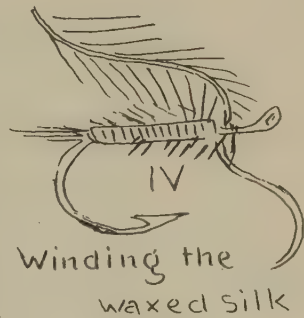
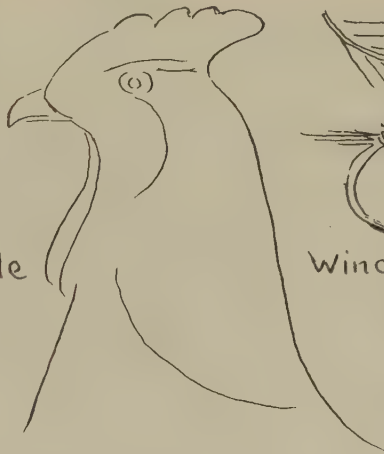
For Angler's Loop see page 43

TYING FLIES

A simple and effective
artificial fly
may be tied with a fish hook,
a length of colored silk,
and a hackle from the neck of a cock.



Tying on the hackle



Winding the
waxed silk

Fig. V

A few close turns
of the hackle

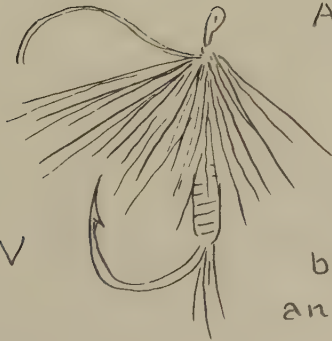
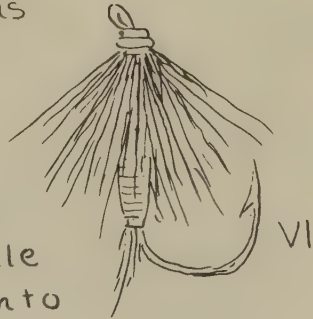


Fig. VI

The silk
secures the
butt of the hackle
and is whipped on to
the hook



to form the head of the fly - A drop of varnish on the head

FISHERMAN'S NET



Fig. I - the Loop

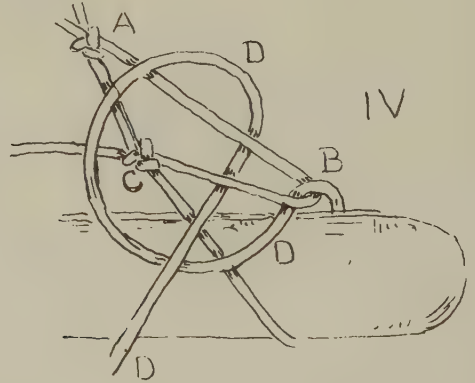
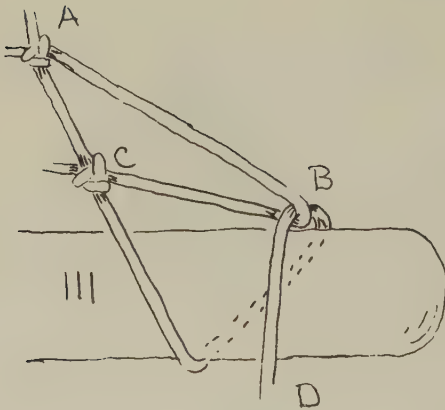
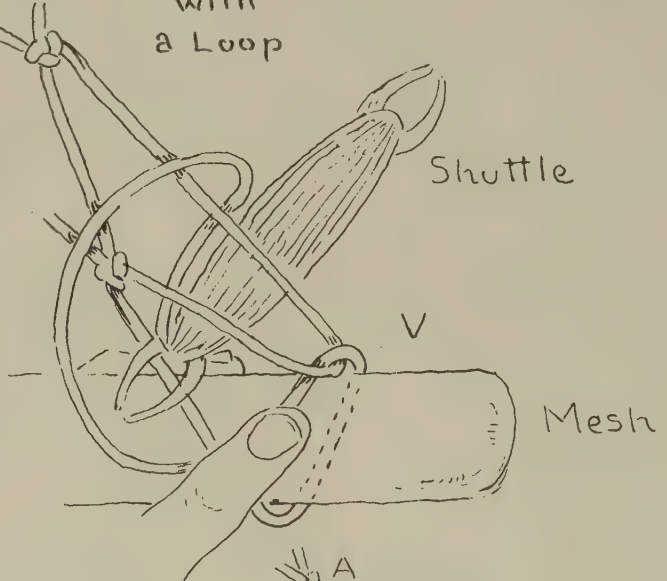
Fig. II Loop and Half Hitch



The Knot
is the same as
the Sheet Bend, Bowline &c.
It is a Half Hitch
combined
with
a Loop

Fig. III
ABC
represents the
Loop

Fig. IV
The end D
ties
the Half Hitch



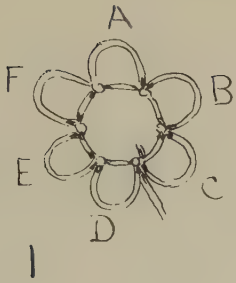
CIRCULAR NET

Fig. I
Tie 6 loops
on a centre loop

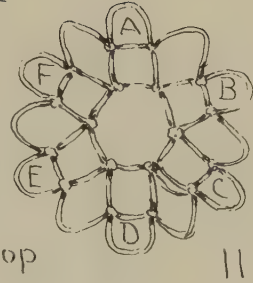


Fig II
Tie 2 knots on each loop

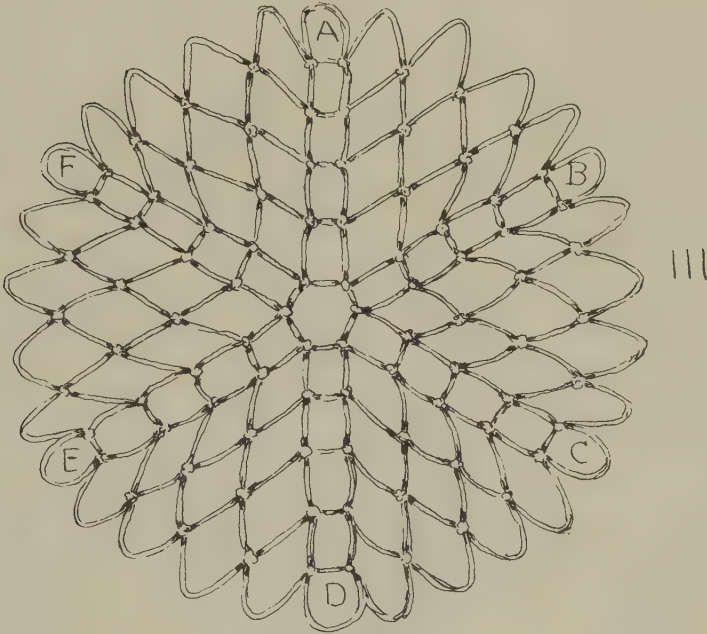


Fig III
The diameter of the net
increases

by tying 2 knots
on each of the loops that lie on
the three lines
AD-BE-CF

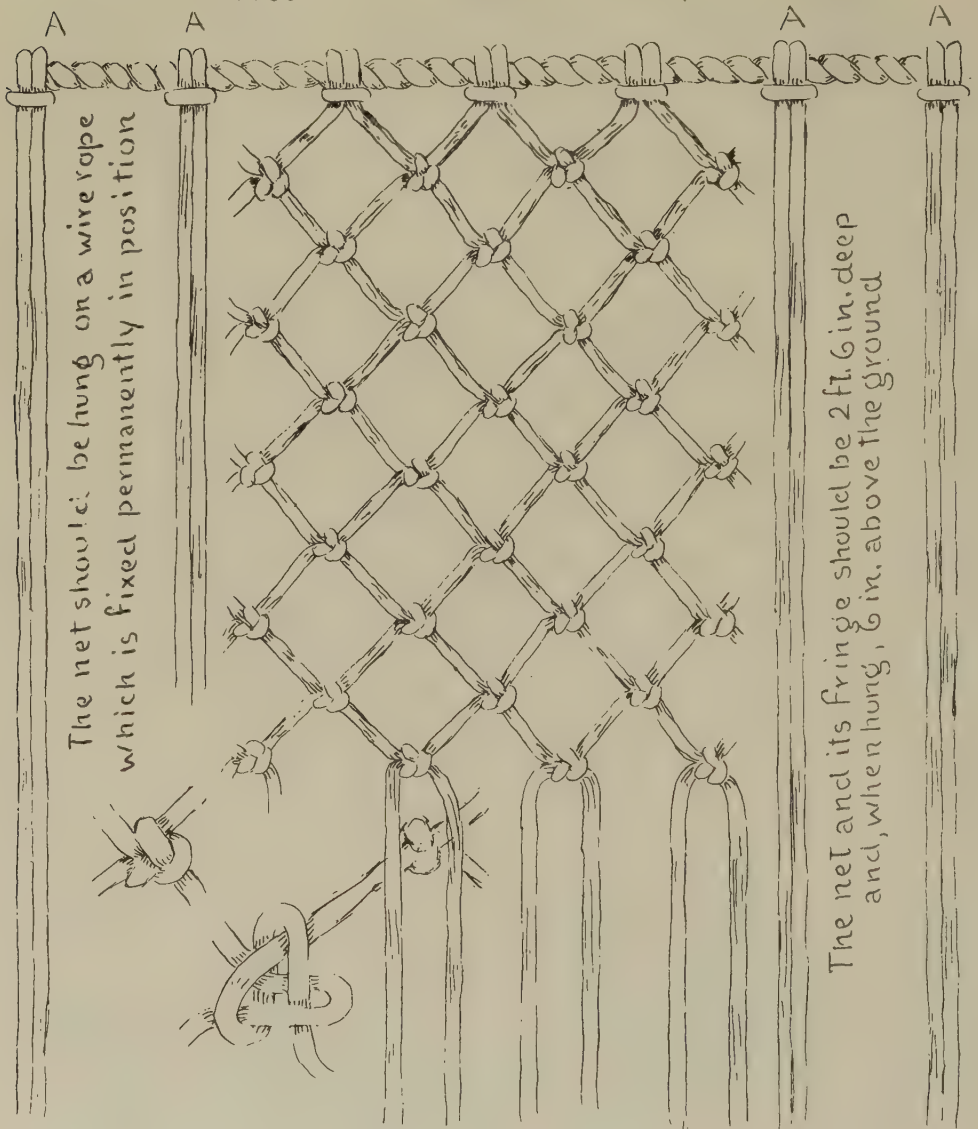


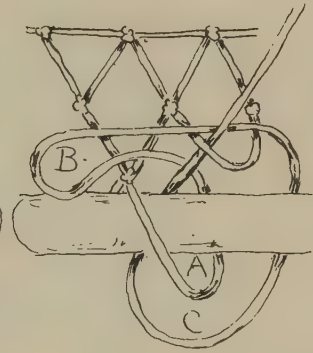
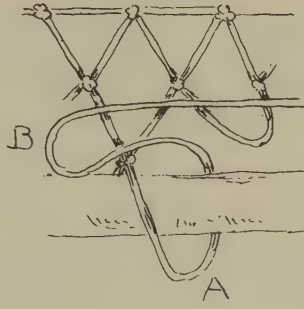
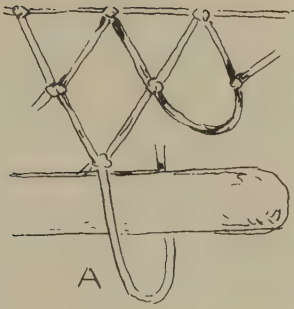
This net can be
tied

TENNIS NET

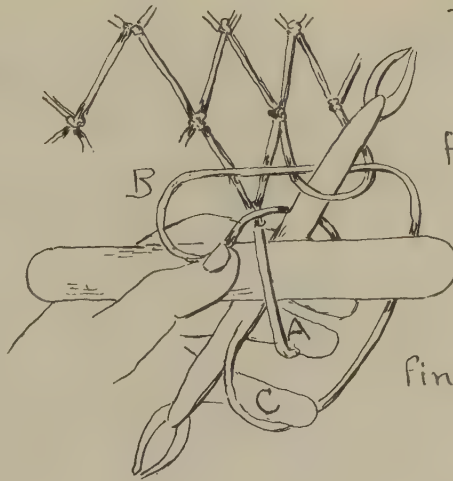
without mesh or
shuttle

Tied with short lines - A, A



NETTING

Tied with 3 loops
Loop A
 around 3 fingers
Loop B
 under left thumb
Loop C
 around the little
 finger



To draw the
 knot
 together,
 first release
loop B
 then
loop A
 and
 finally loop C

TYING PACKAGES

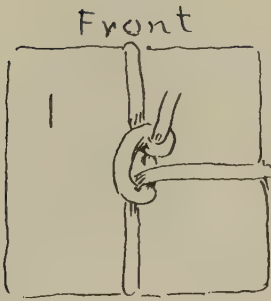
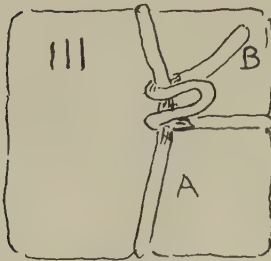
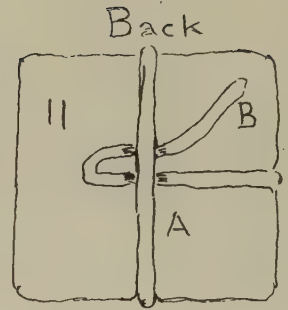
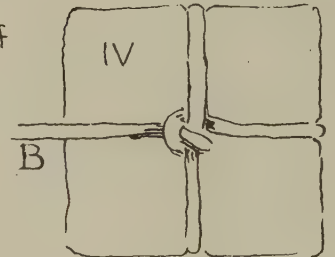


Fig. I
Begin with the
Packers' Noose



Back

Fig. II
Pass the bight of
the line under
the strand
A



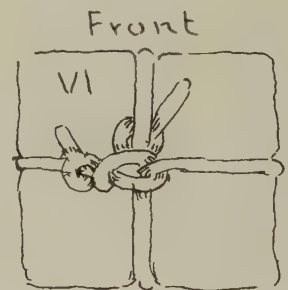
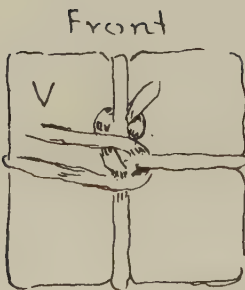
Back

Fig. III
With the bight
draw the strand A taut

Fig. IV
Pass the end B through the bight and
draw the knot taut

Figs. V and VI

Finish
with two or three
Half
Hitches

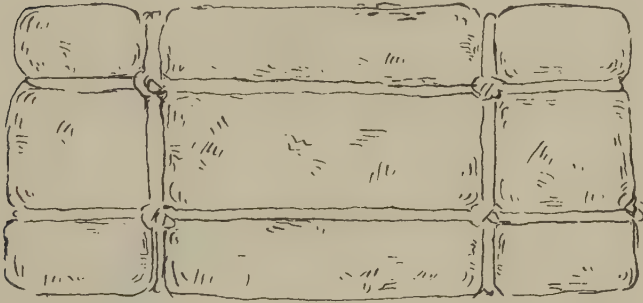


TYING PACKAGES

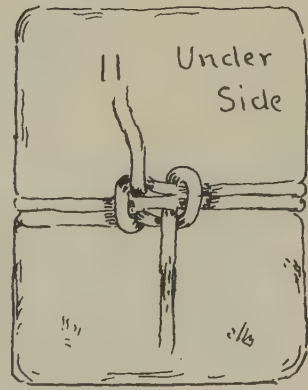
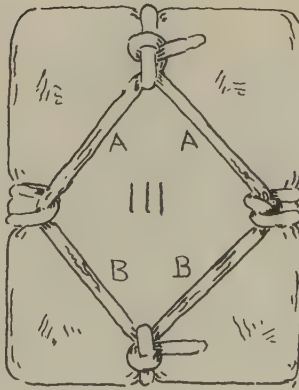
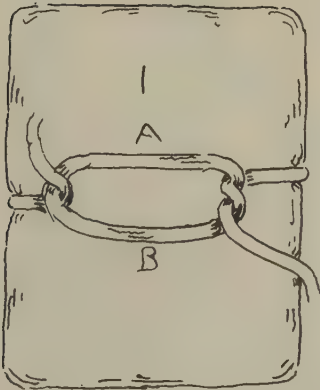
Fig 1

Introduced here as a not-too-difficult puzzle

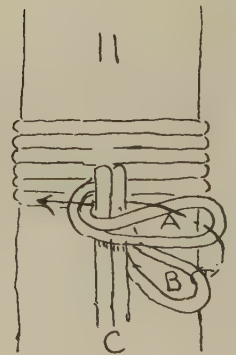
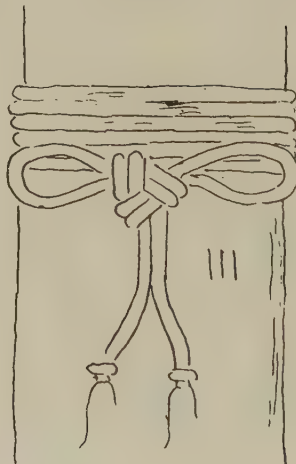
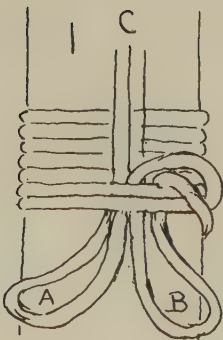
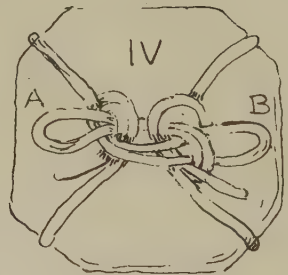
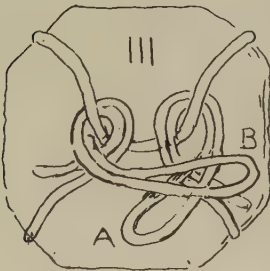
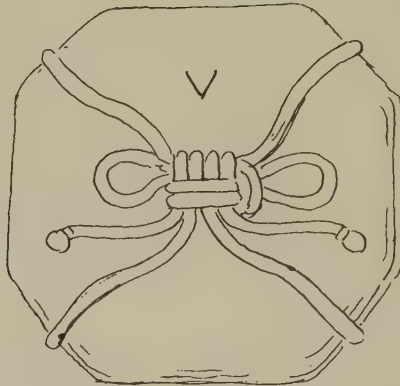
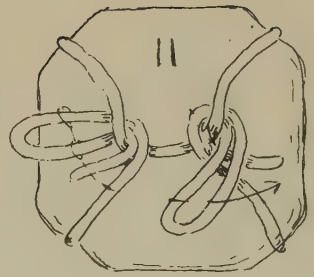
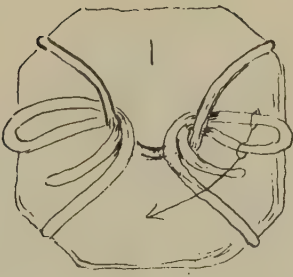
{ Tie a 4-strand package
with a single line, the begin-
ning and the end not shown }

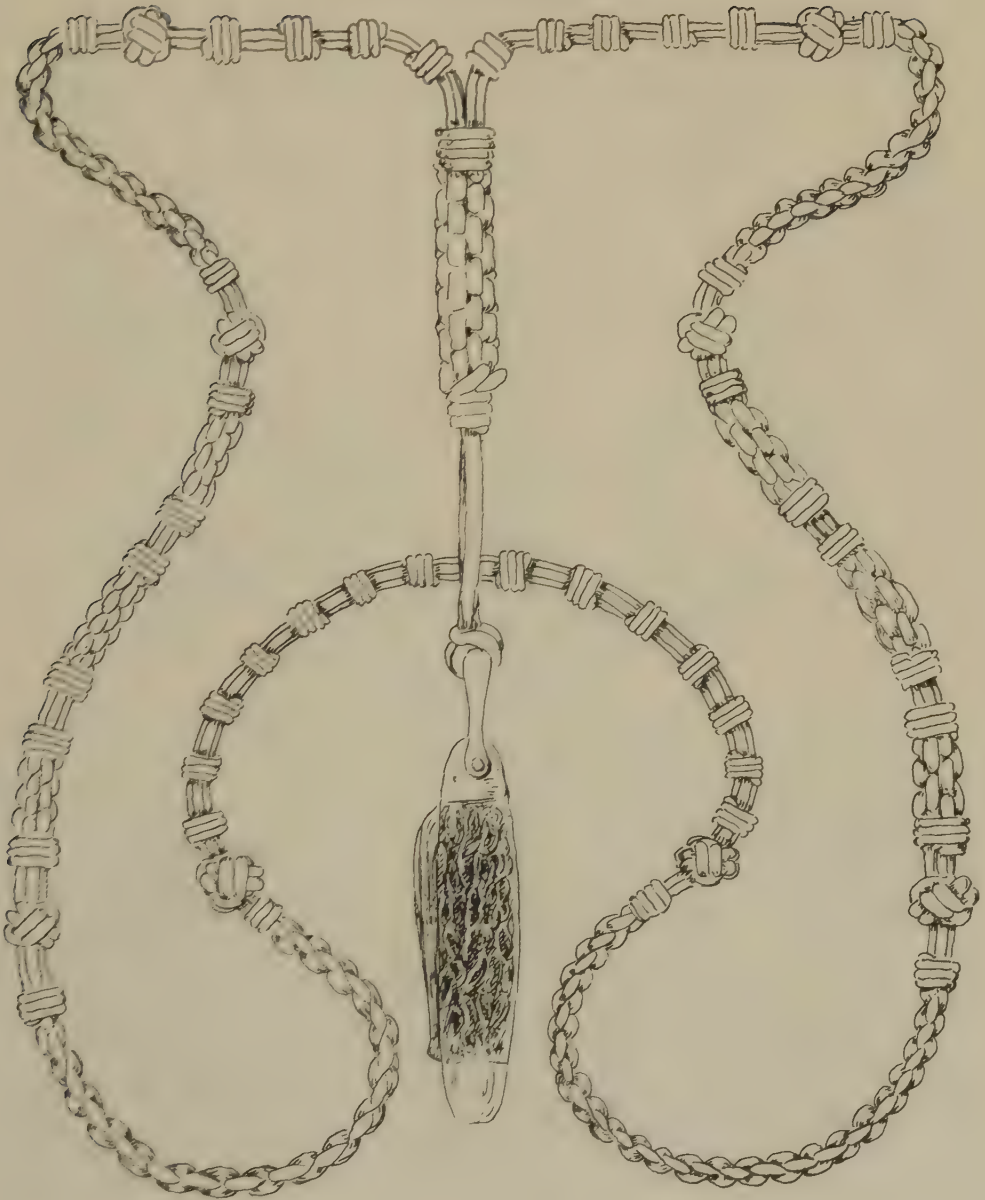


Diamond Tie



JAPANESE
KNOTS



KNIFE - LANYARD

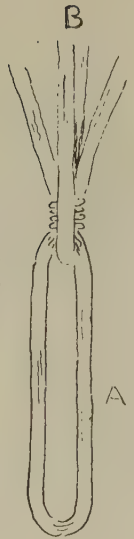
WATCH FOB

Begin with a doubled line

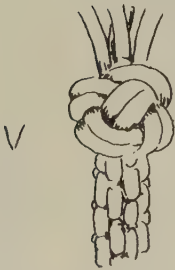
A - Fig. I

Add another doubled line

B - Fig. II



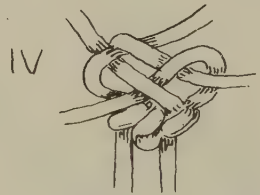
Wall the four strands
together



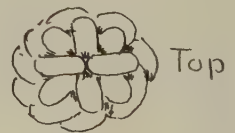
Finish with a
4-strand Double
Diamond



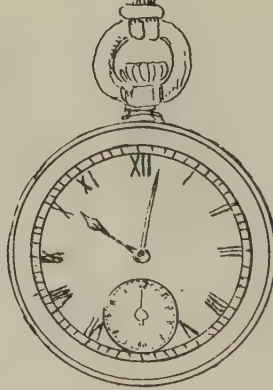
VII



Begin the Crown Braid
page 81



Top



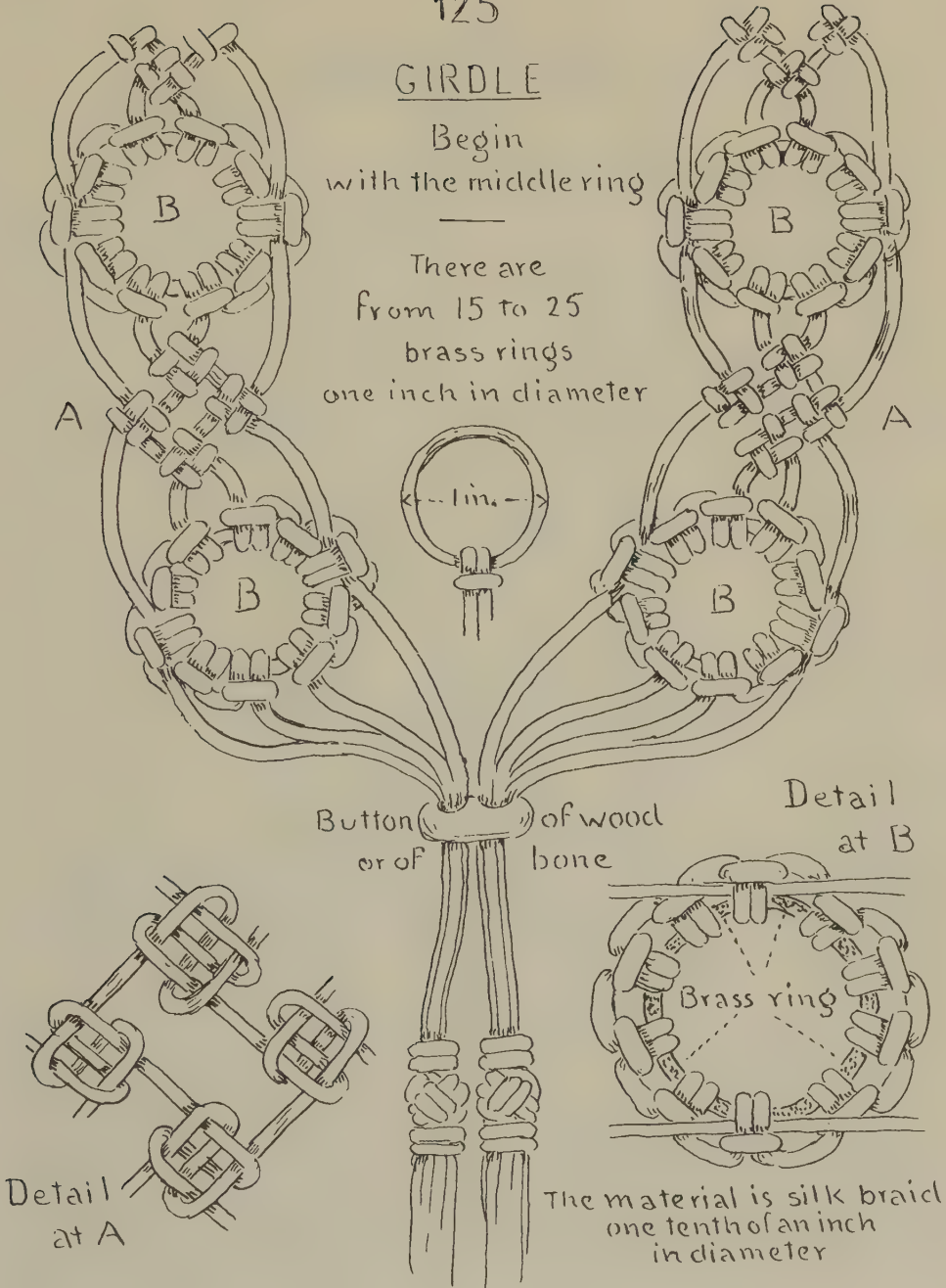
Crown the ends
and pass them down
through the knot and
cut them off

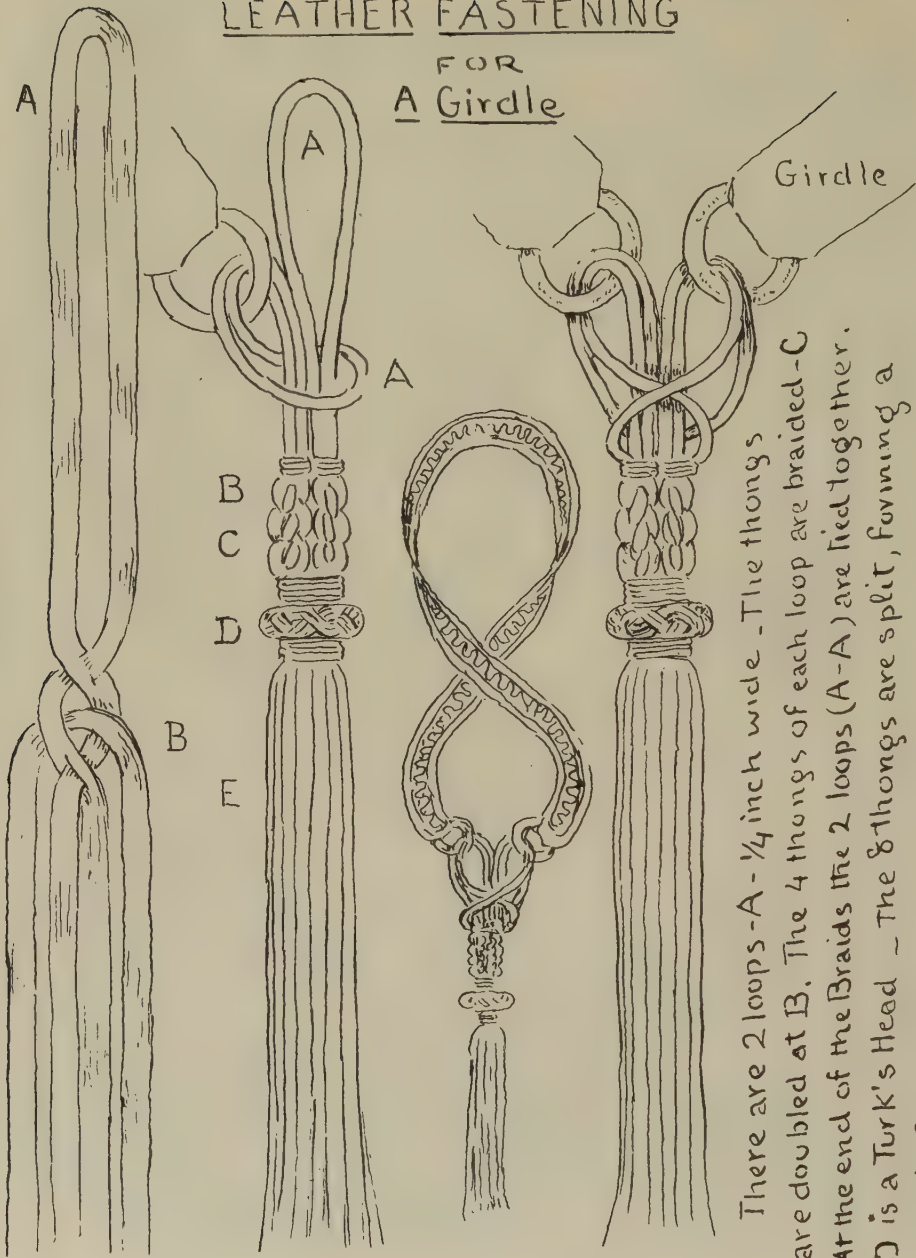
125

GIRDLE

Begin
with the middle ring

There are
from 15 to 25
brass rings
one inch in diameter



LEATHER FASTENINGFOR
A Girdle

There are 2 loops - A - $\frac{1}{4}$ inch wide. The thongs are doubled at B. The 4 thongs of each loop are braided - C. At the end of the Braids the 2 loops (A-A) are tied together. D is a Turk's Head. The 8 thongs are split, forming a tassel of 16 strands.

LEATHER BELT

Fig. I

A - Part of Belt
slit into

Three Strands - See page 86

and
BUCKLE

Fig. I

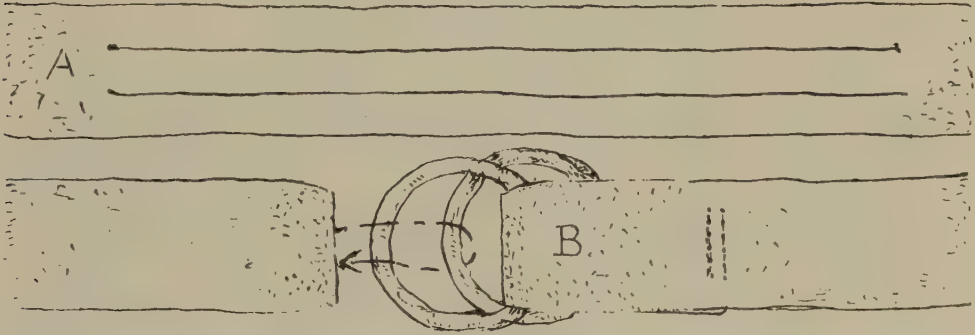
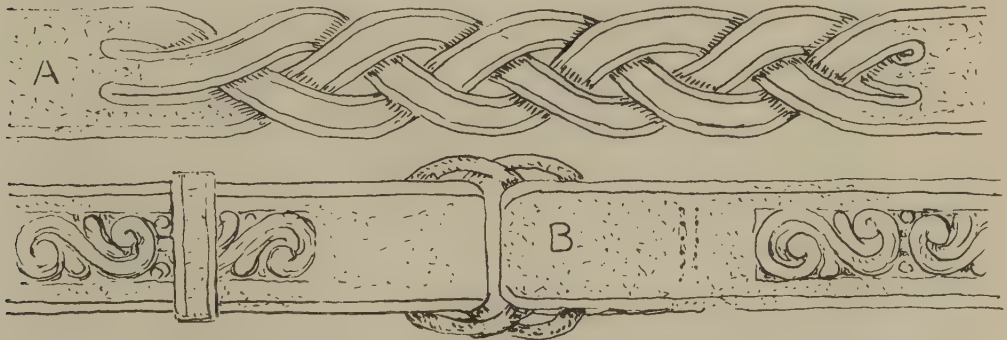
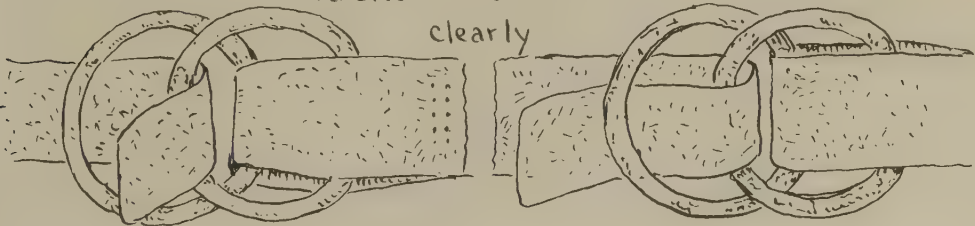
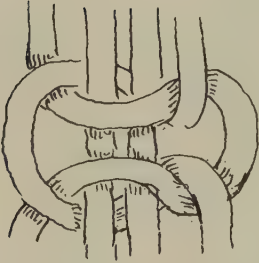
B - Two iron or
brass rings

Fig II-A-The strands braided - B- The buckle fastened

Fig. III - The inside of Buckle - The rings enlarged
to show method more
clearly

MACRAME' KNOTS

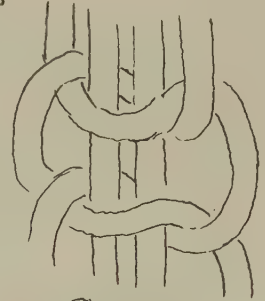
These are
The Square Knot, the Half Hitch and the Granny
tied around
one or more idle lines
drawn taut



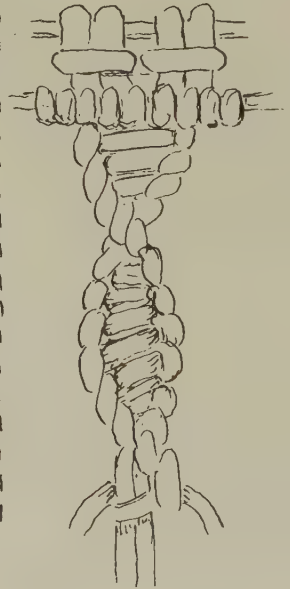
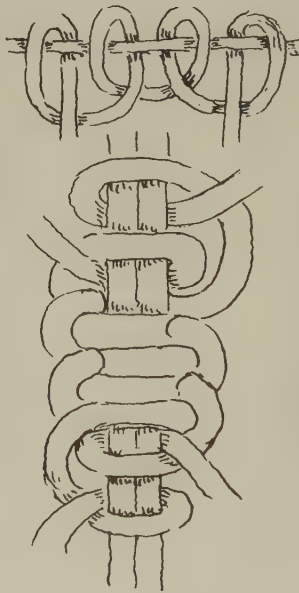
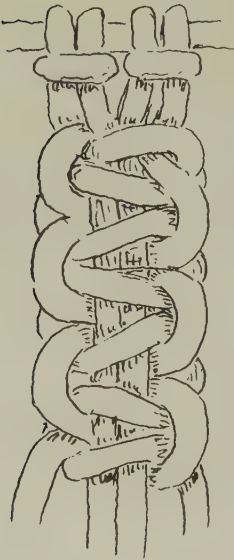
Square Knot

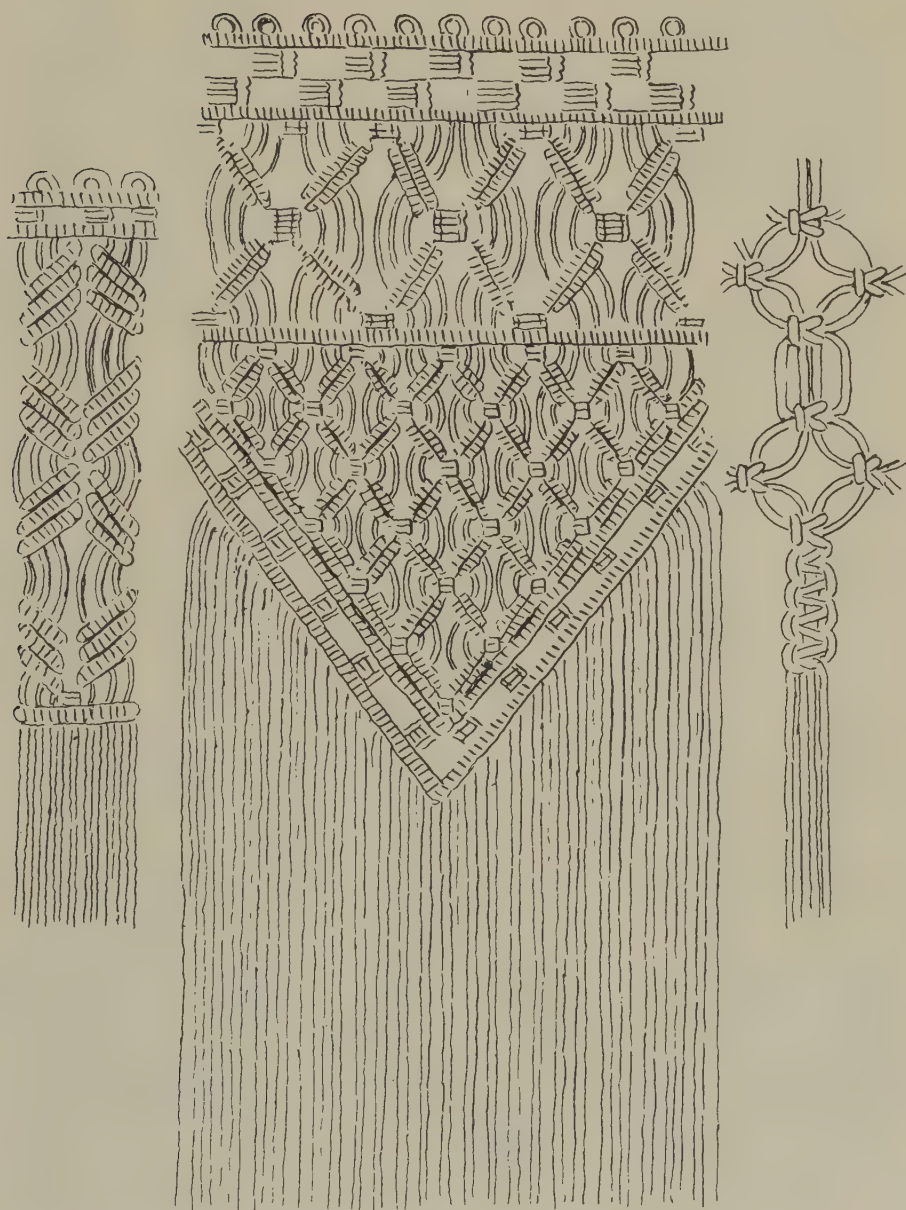


Half Hitch



Granny



MACRAME KNOTS

TATTING LOOP

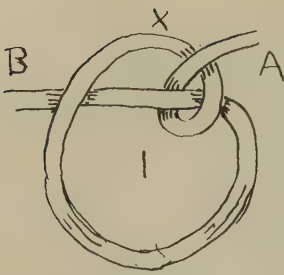


Fig. I
A Half Hitch
of the end A
around the end B

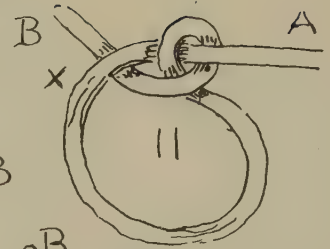


Fig. II
By pulling
x & A
B becomes a Half Hitch
around A

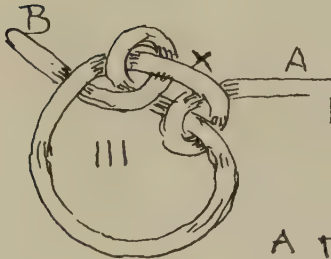


Fig. III
A ties a second Half Hitch
which is also upset by pulling
x and A

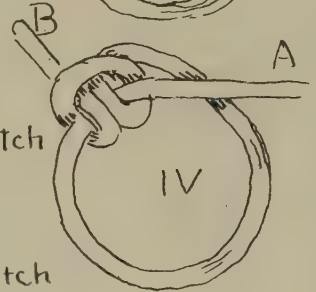
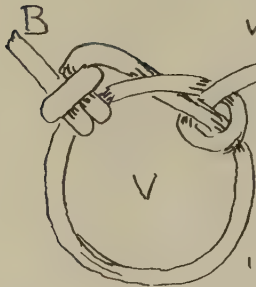
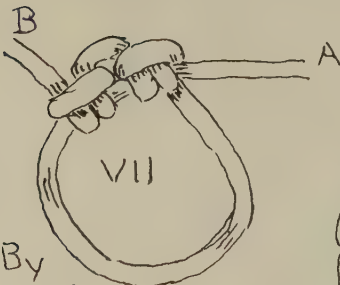
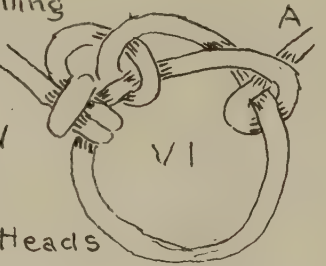


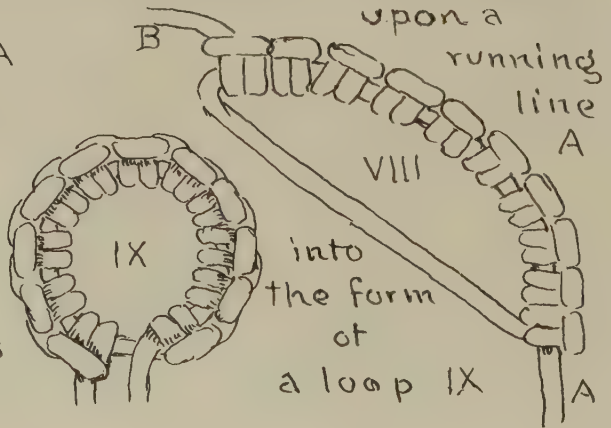
Fig. IV
These 2 knots form
a Lark's Head



The Tatting Loop
is a row of such Lark's Heads



By
pulling A, Fig. VIII
The Lark's Heads
are drawn



into
the form
of
a loop IX

TATTING

Insertion



Insertion

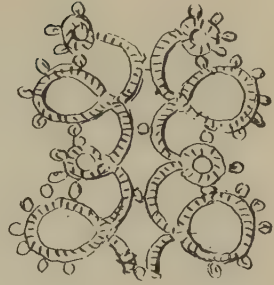


Fig. II

Round Braid



See page 77

Fig I Loop

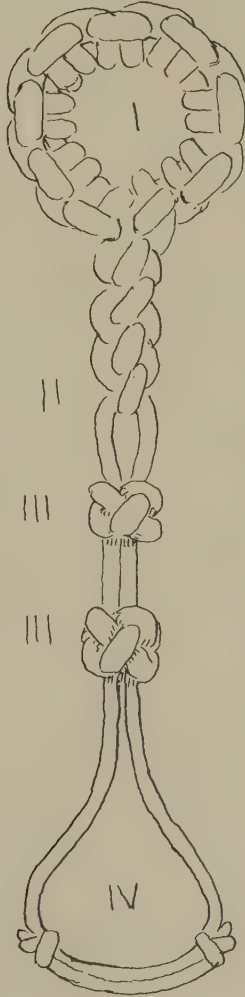
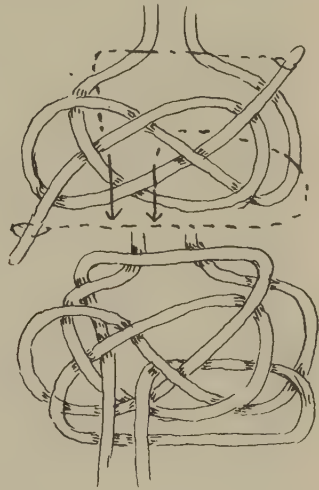


Fig III

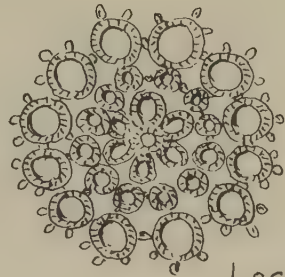
Diamond Knot



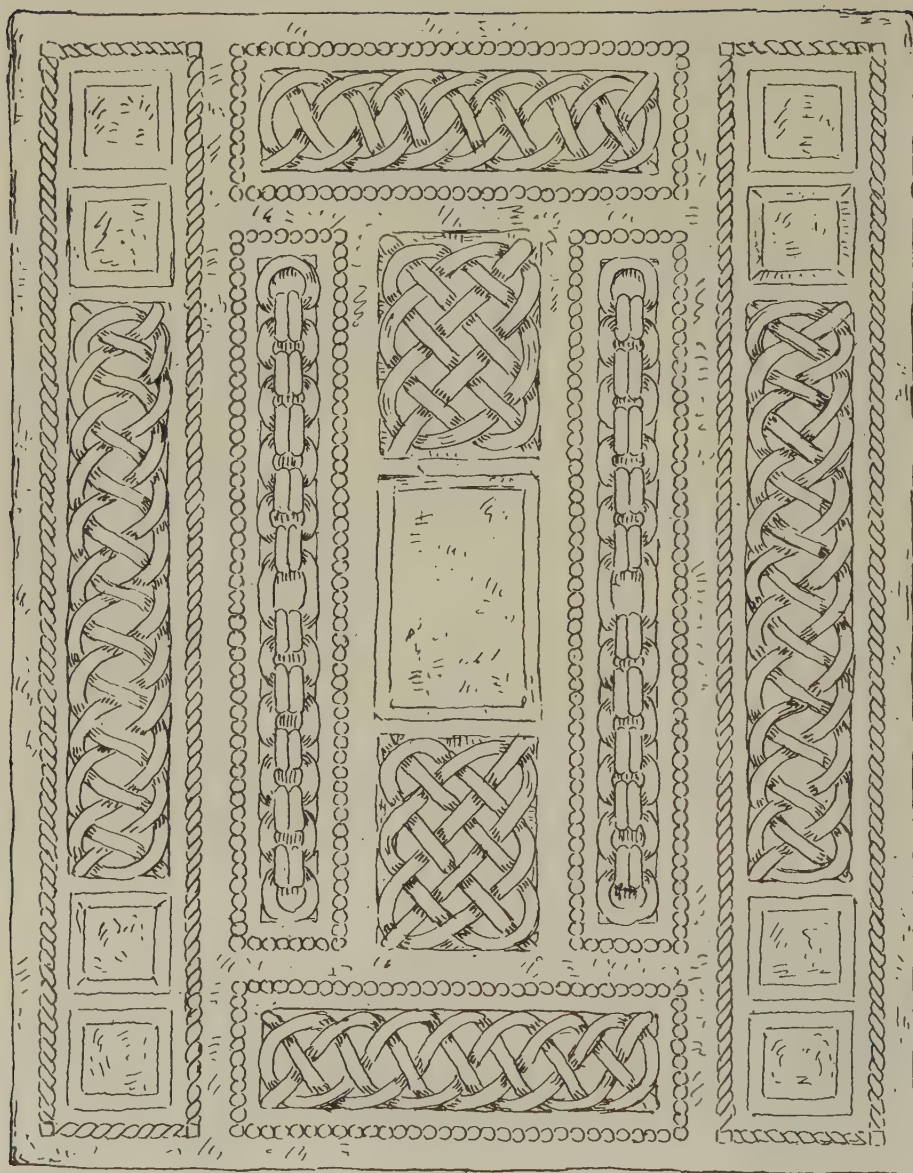
Lace

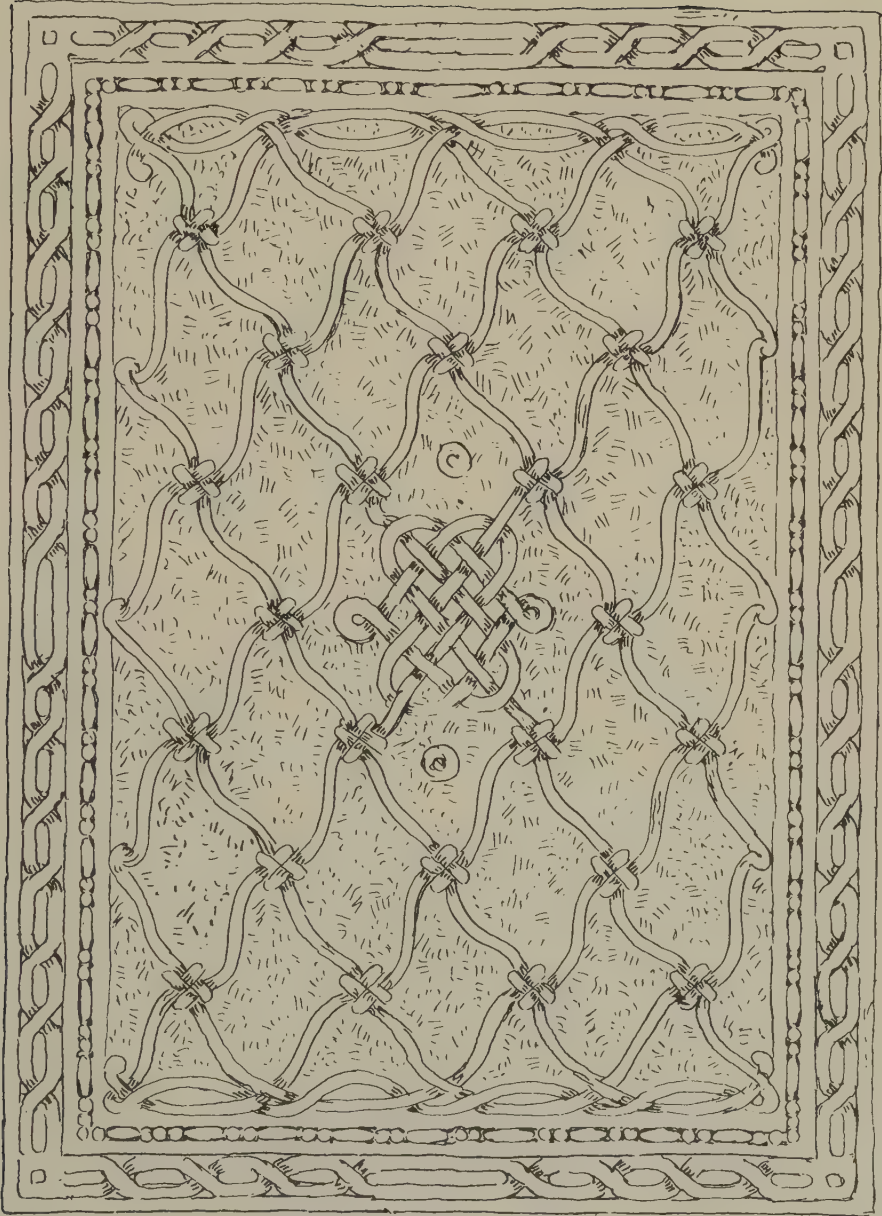
Fig. IV

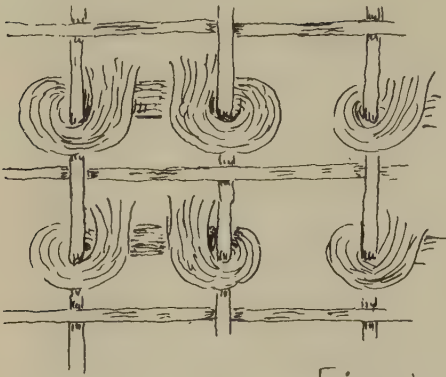
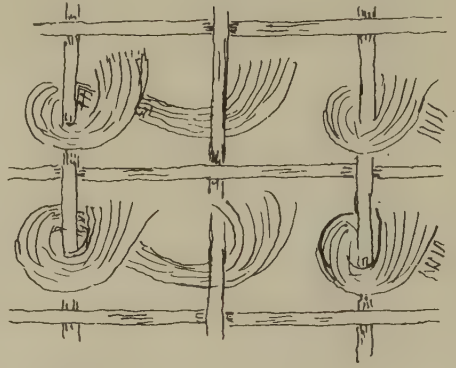
Water Knot



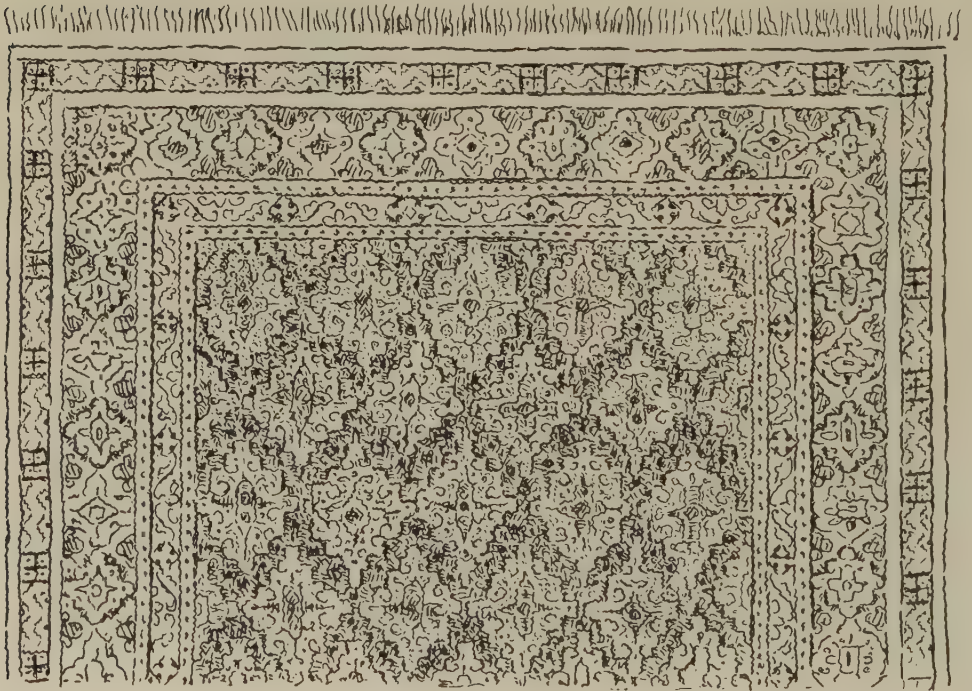
Lace



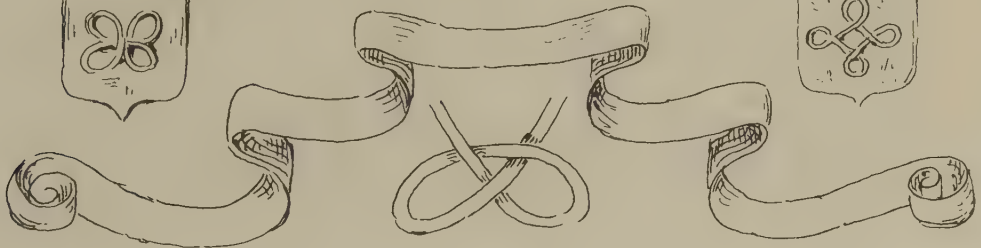
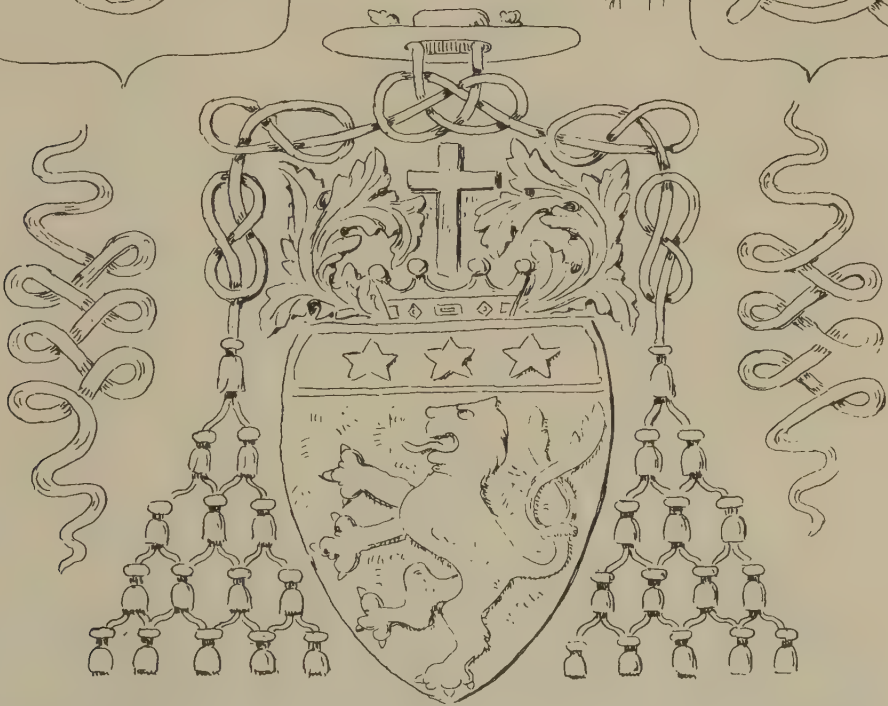
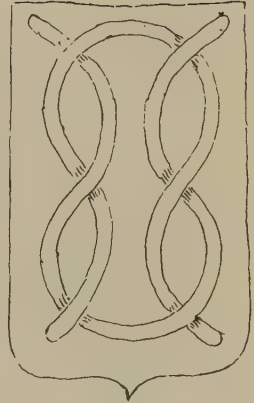
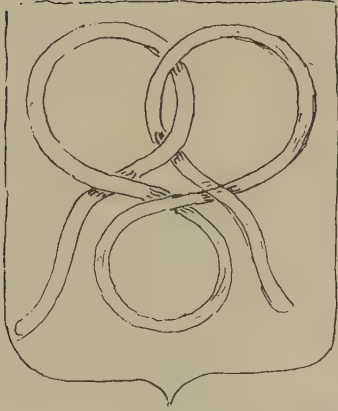


ORIENTAL RUGSTurkish KnotPersian Knot

Five hundred Knots
to the square inch are not unusual



KNOTS
IN
HERALDRY



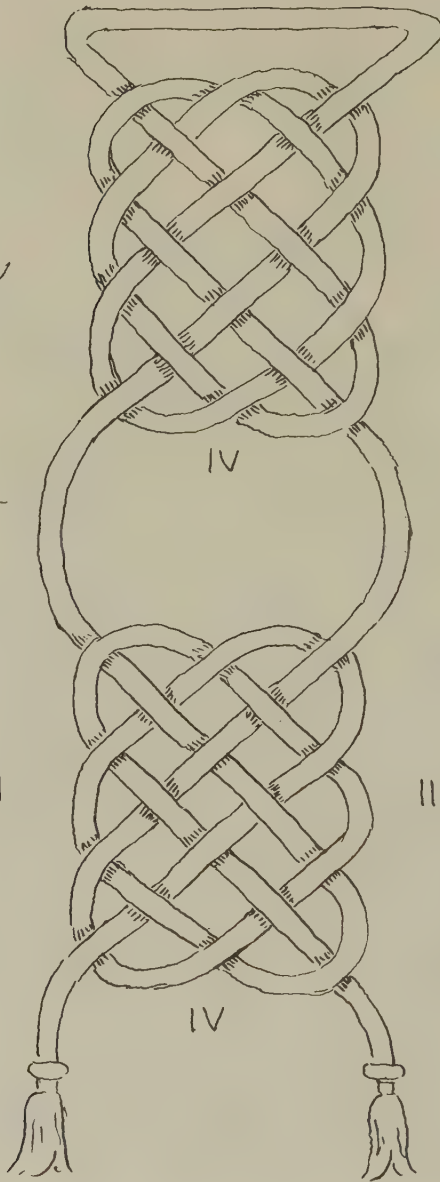
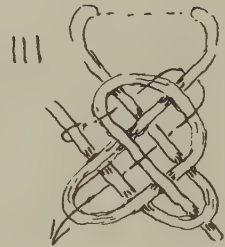
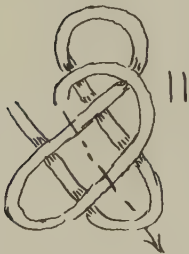
CHINESE KNOT

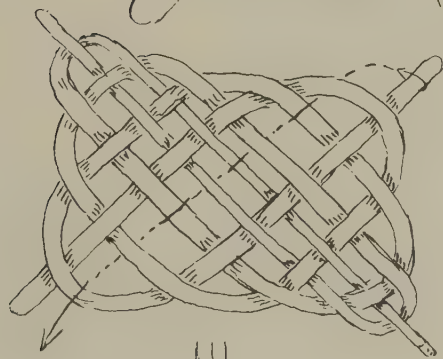
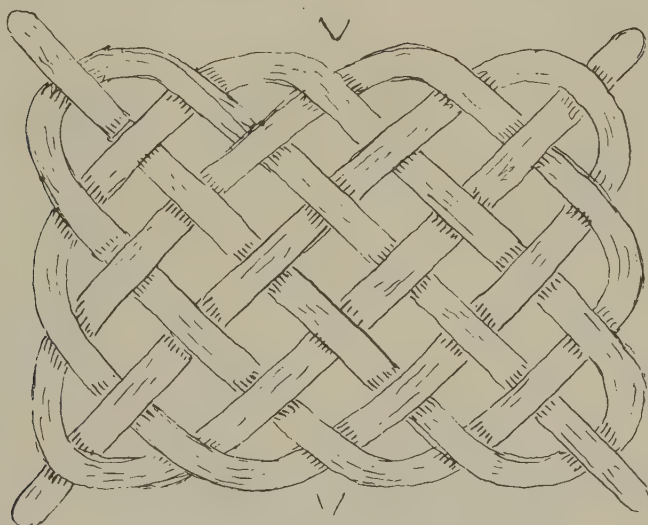
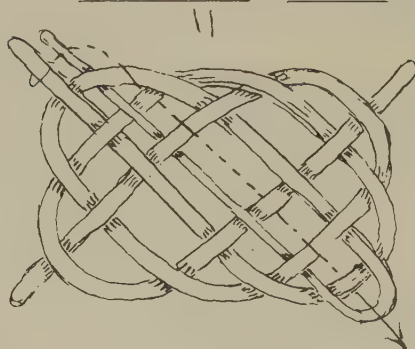
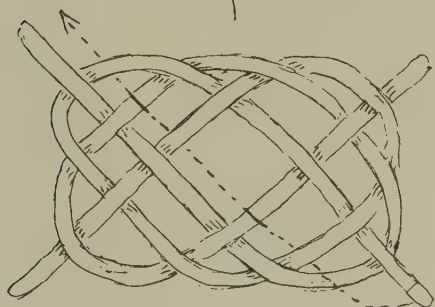


The Knot
may be tied
with
one line
Fig. 1-a



or it
may be tied
with
two lines
Fig. 1-b



ADDING STRANDS to the CHINESE KNOT

DEVELOPMENT of Interlacings of any number of strands

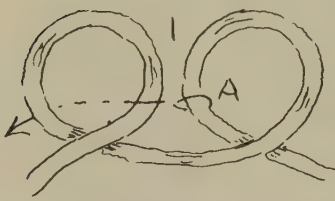
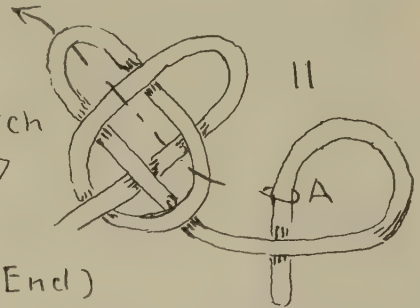
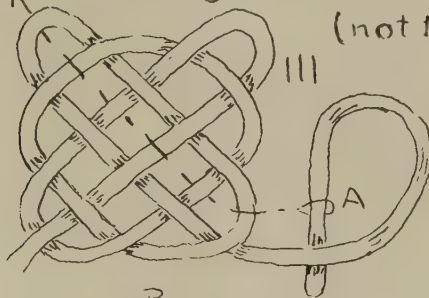


Fig. I
Clove Hitch
page 7

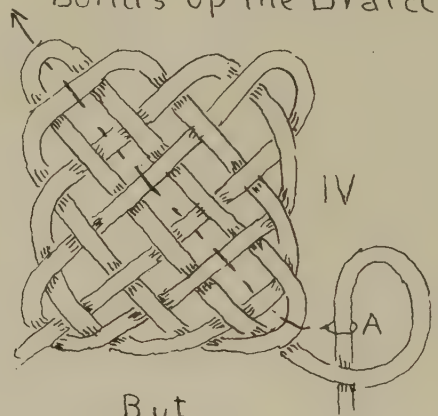


The Bight at A
(not the End)

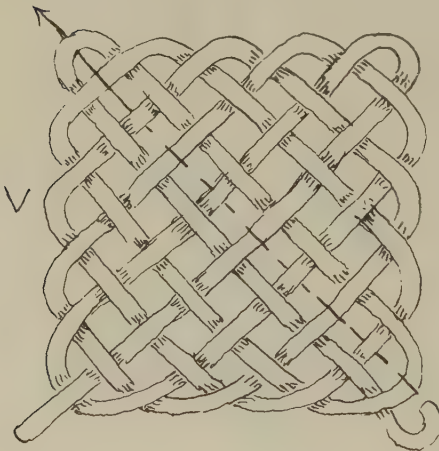
builds up the Braid

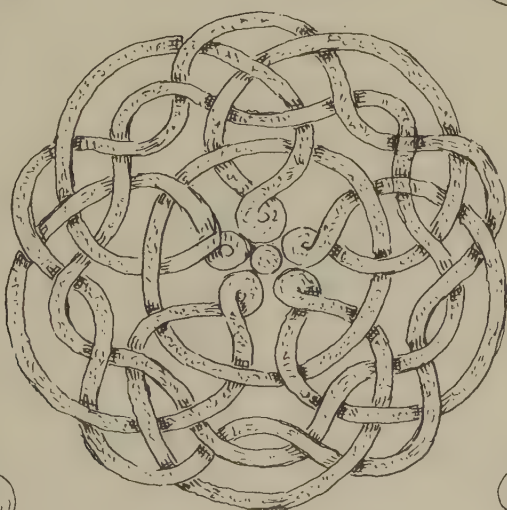
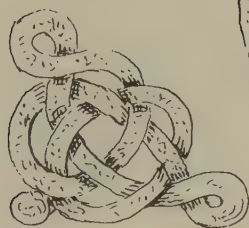
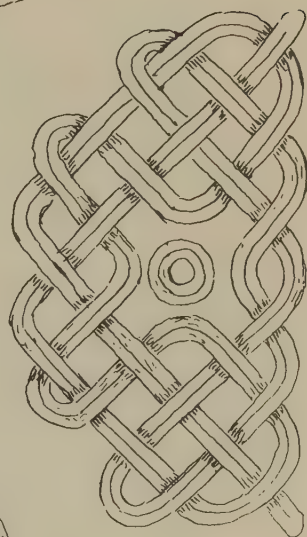
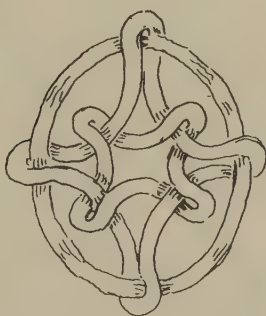
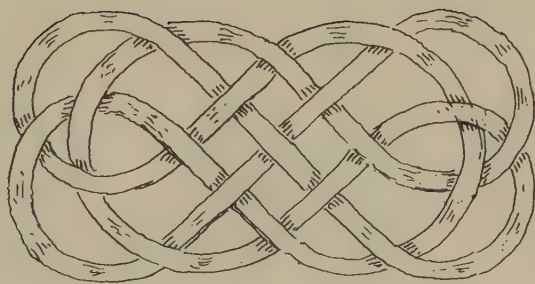


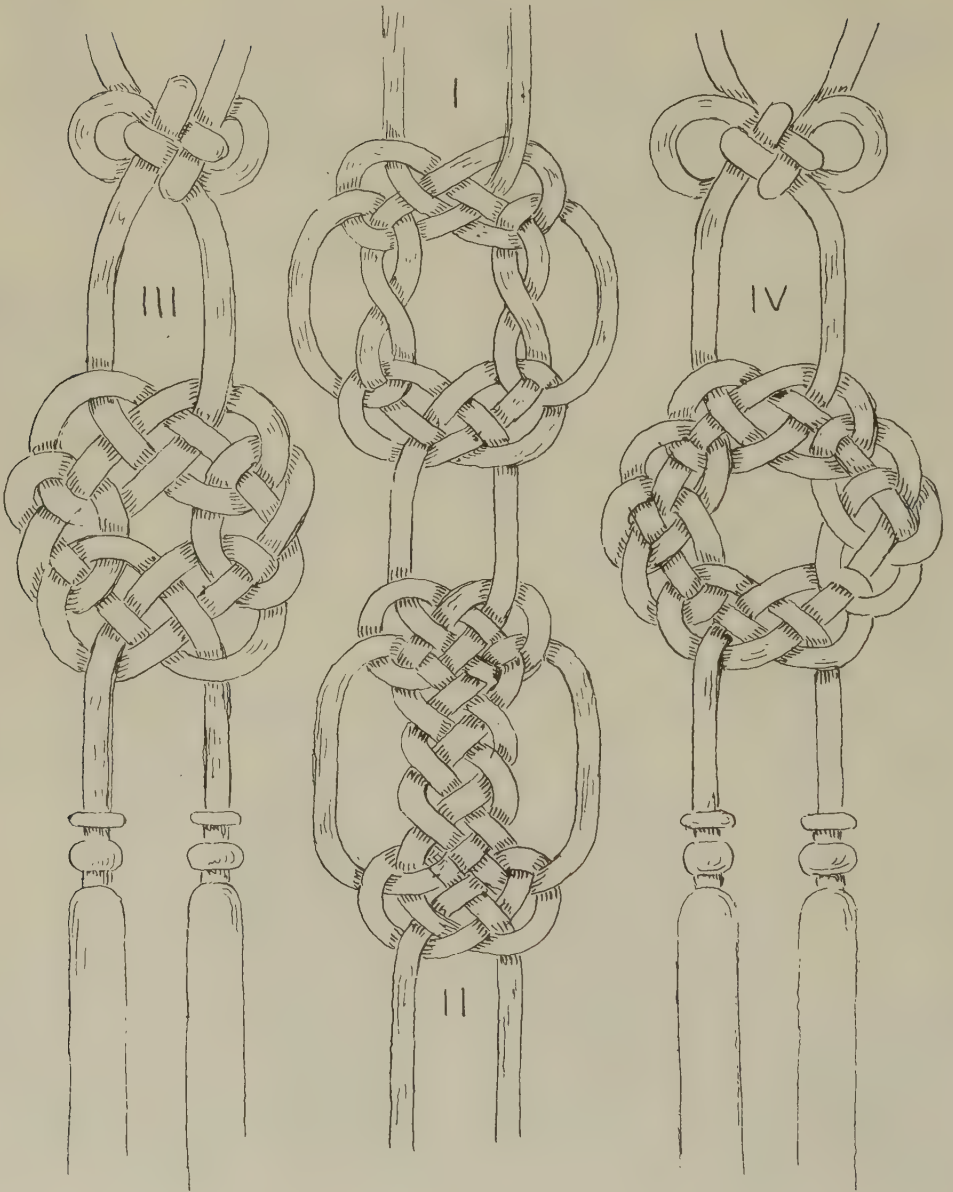
By
pulling the 2 ends
of the line
the Braids fall apart



But
if the End of the line
(not the Bight) is passed
through the Braid
as in Fig. V
the Interlacing
cannot fall apart
and the work can be so ended
at any one of its stages.





TEMPLE ORNAMENTS

Details of Temple Ornaments

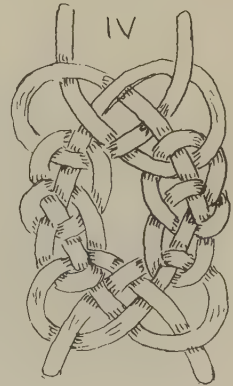
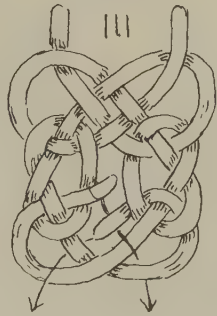
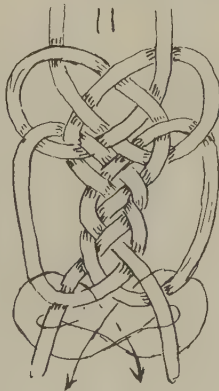
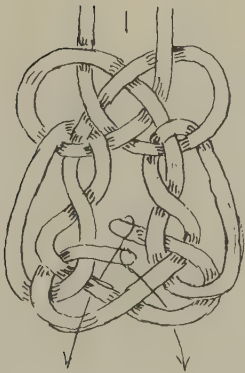
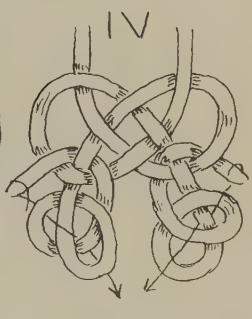
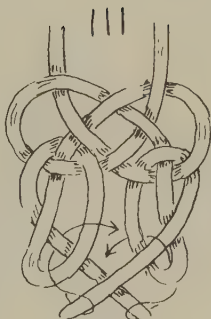
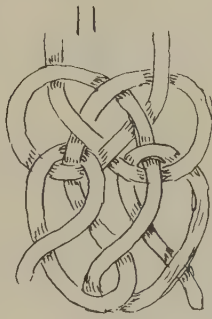
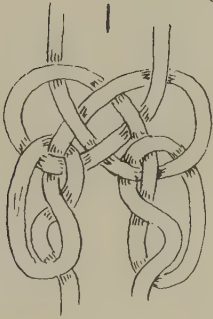
A - begins all four knots

B - belongs with Knots
I & IIC - belongs with Knots
III & IV

A

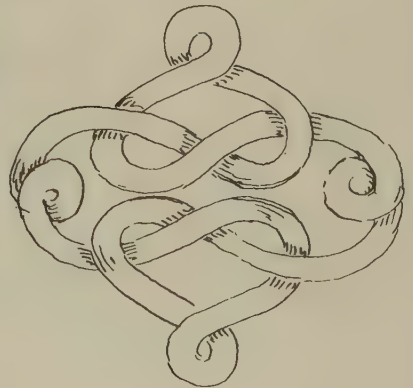
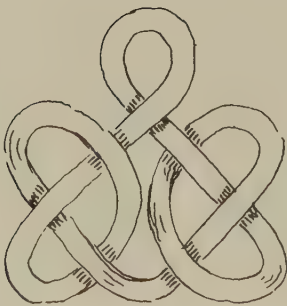
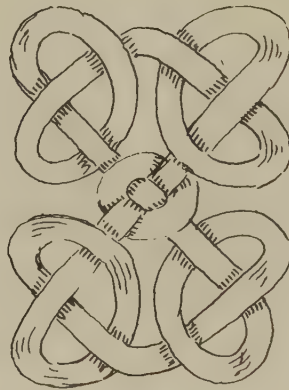
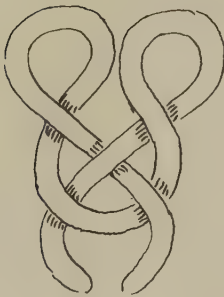
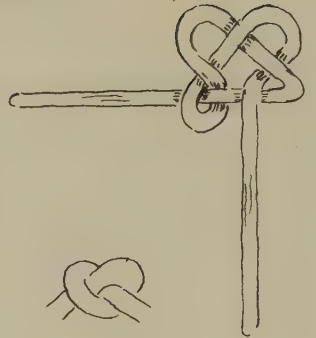
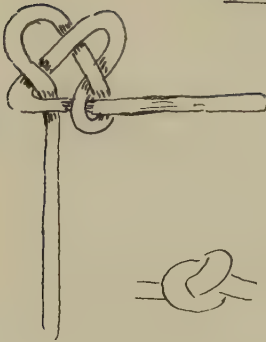
B

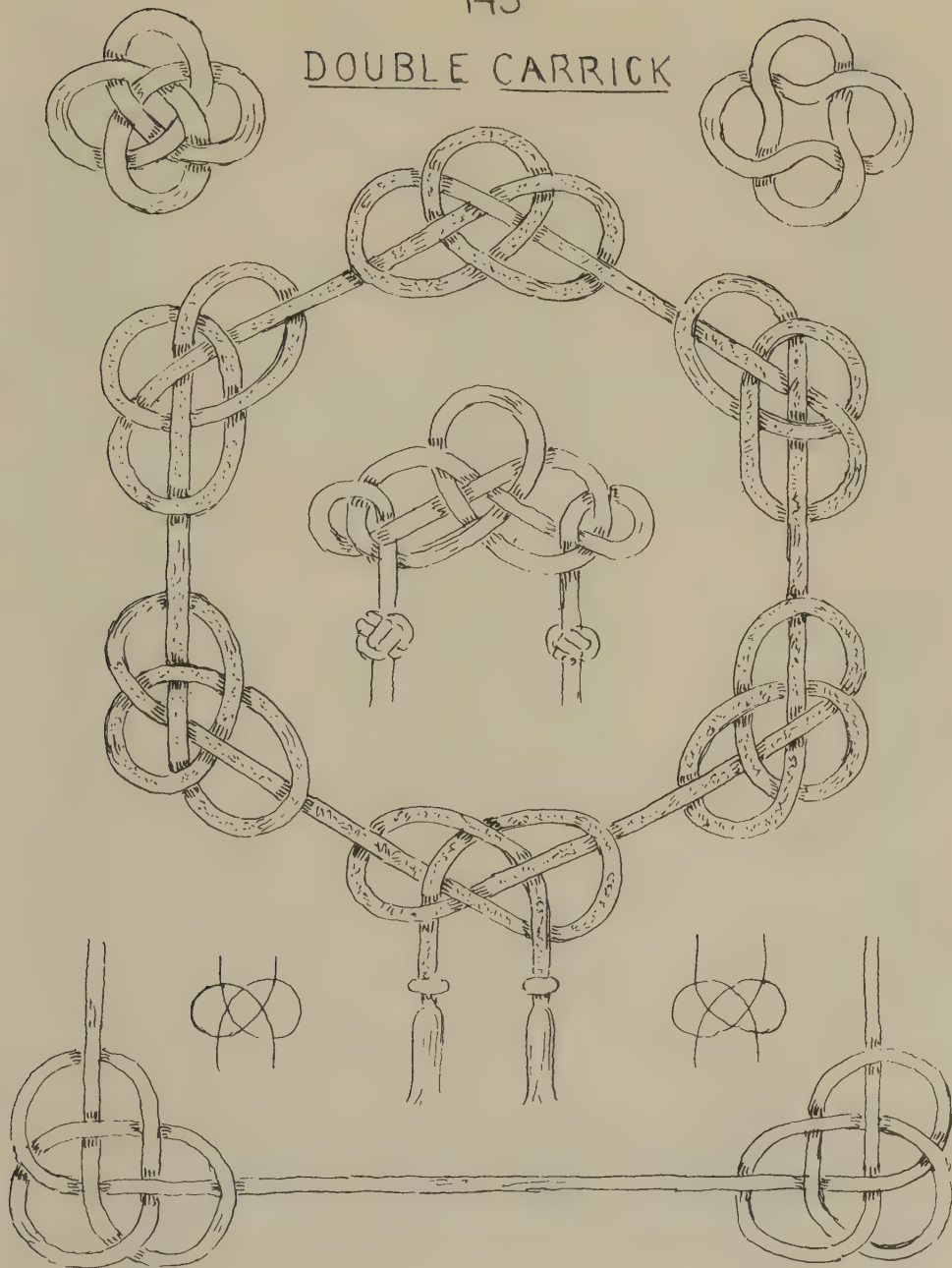
C



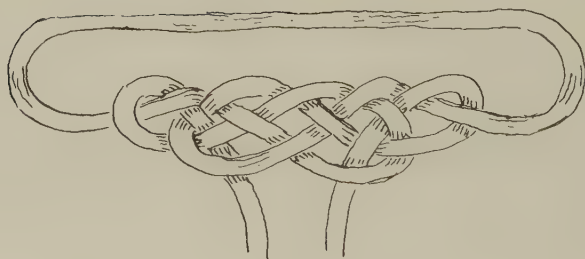
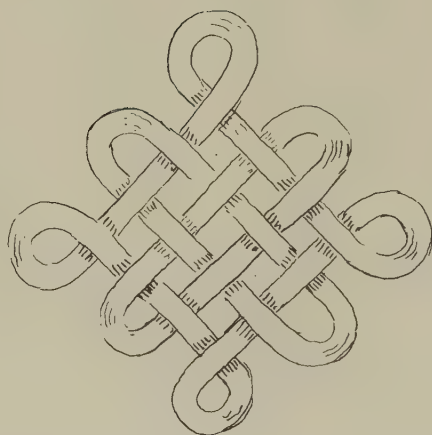
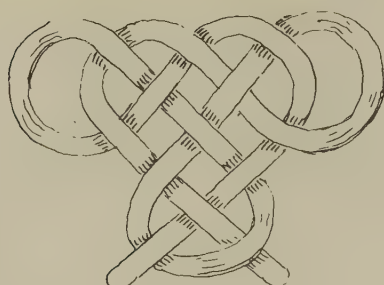
ORNAMENTAL FORMS

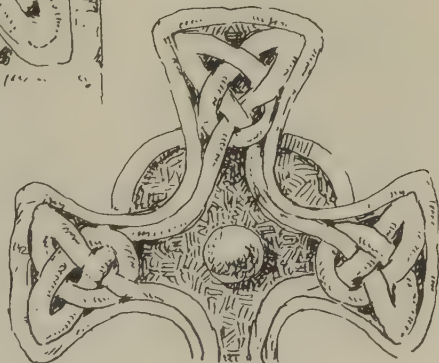
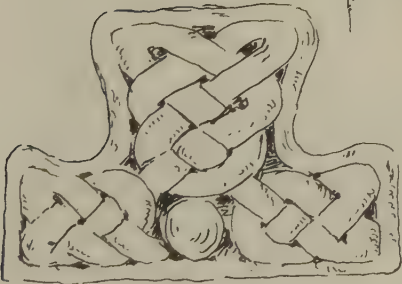
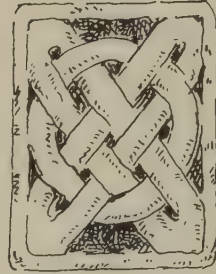
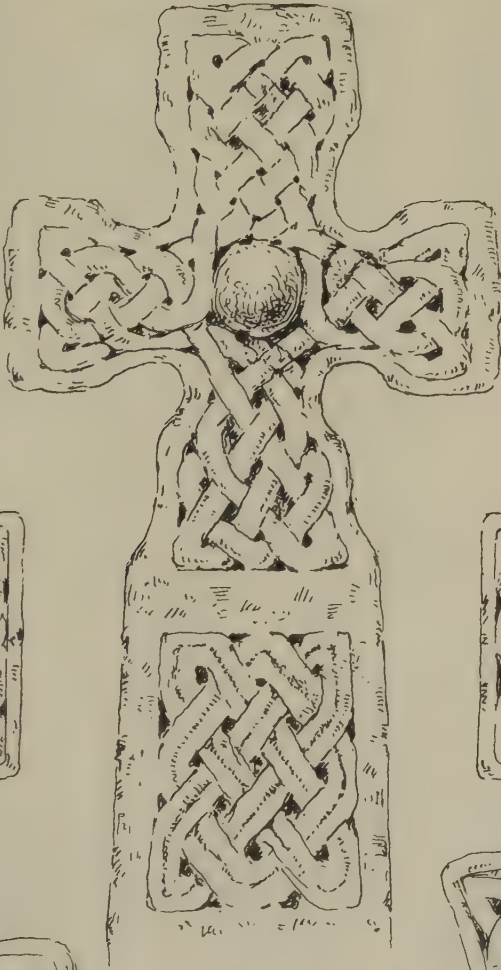
based on the
Overhand Knot



DOUBLE CARRICK

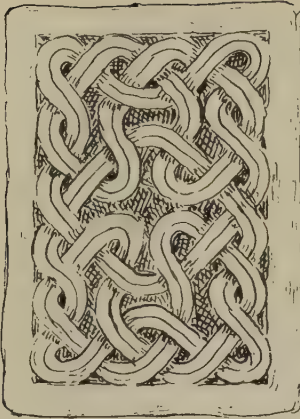
144
ORNAMENTAL KNOTS



CELTIC KNOTS

CELTIC INTERLACINGS

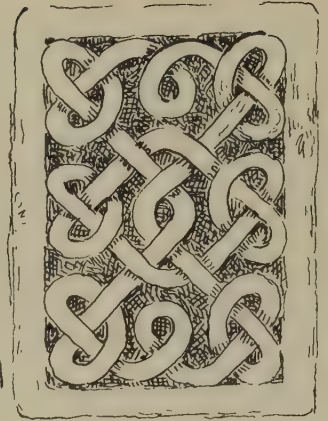
Panels
II, III, IV & V
are modifications
of panel I



II

I

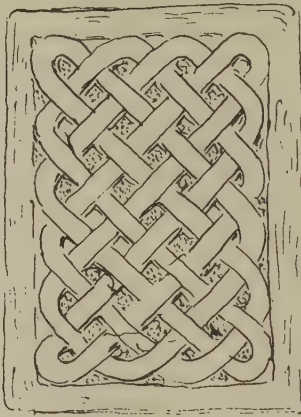
III



A



B



C



D



IV

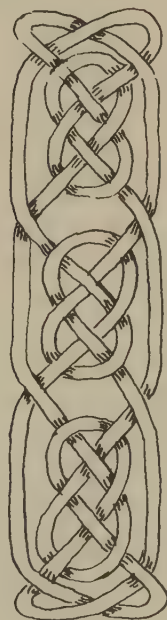
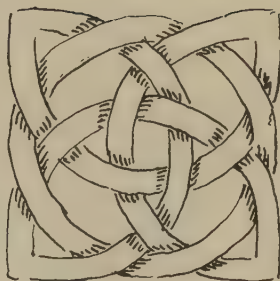
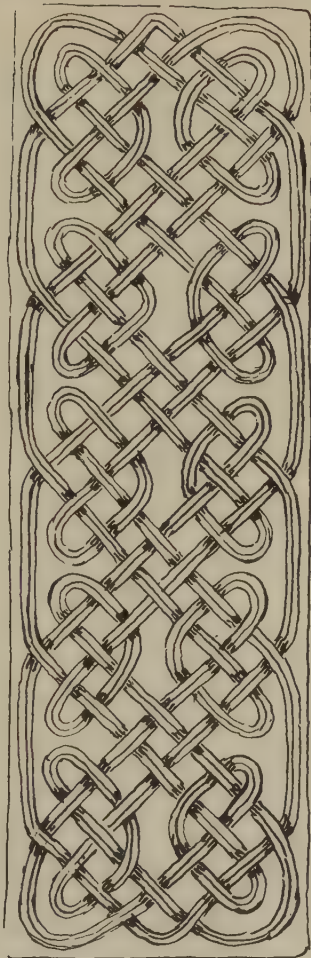
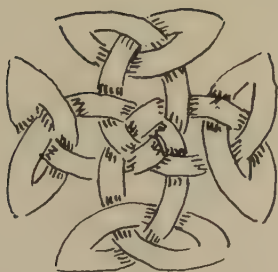
V



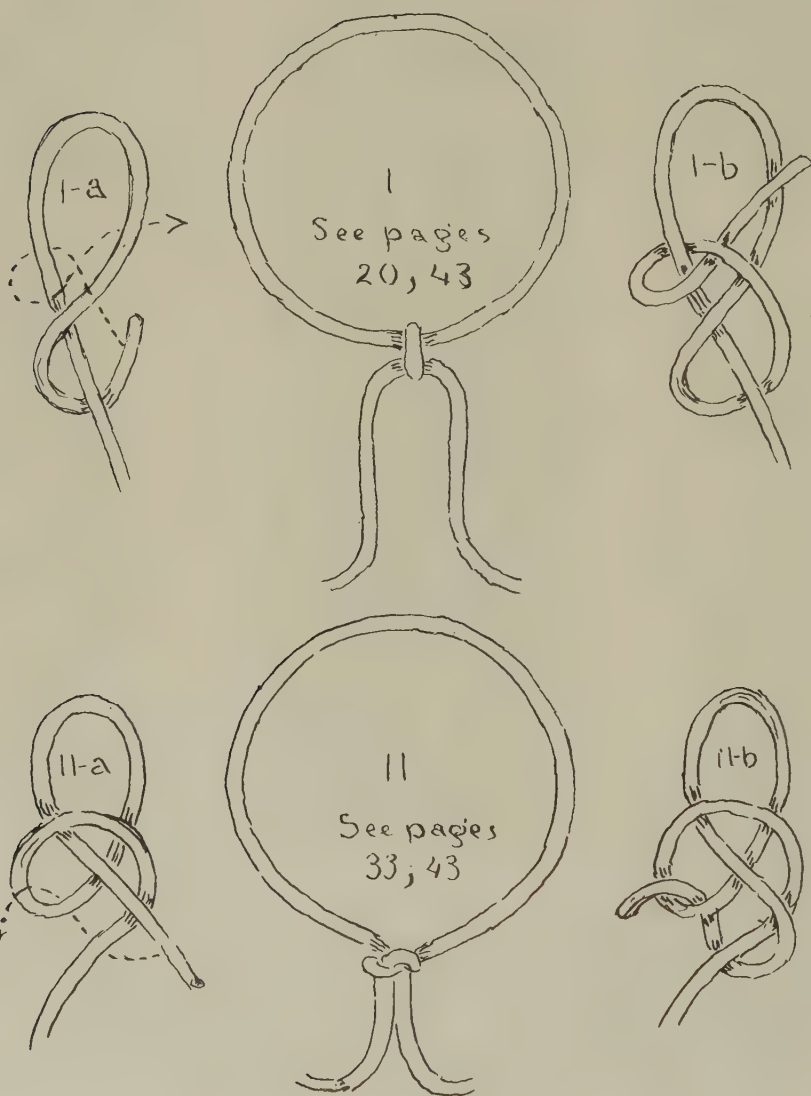
Fig. A
may be changed to B
or to



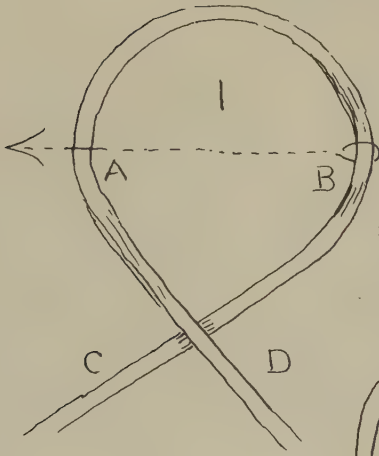
Fig. C
can be changed to D

CELTIC KNOTS

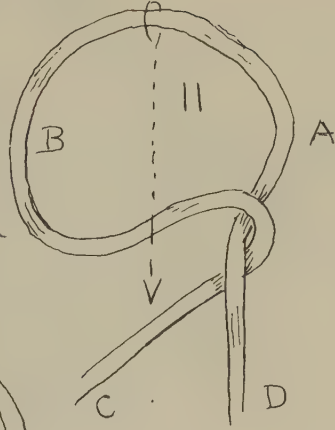
JAPANESE KNOTS



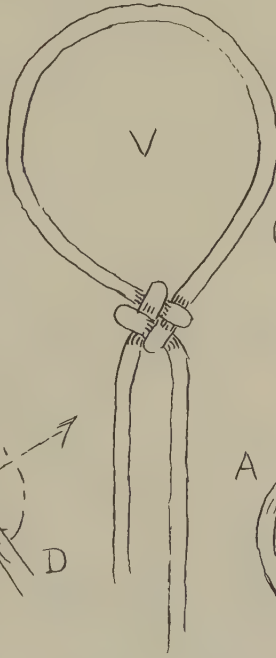
JAPANESE CROWN KNOT



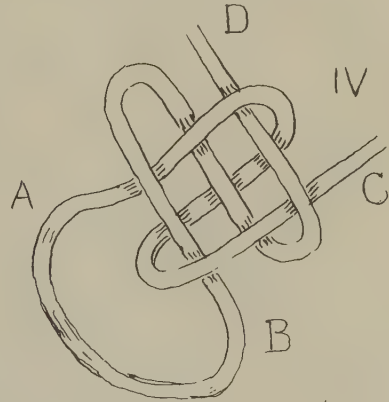
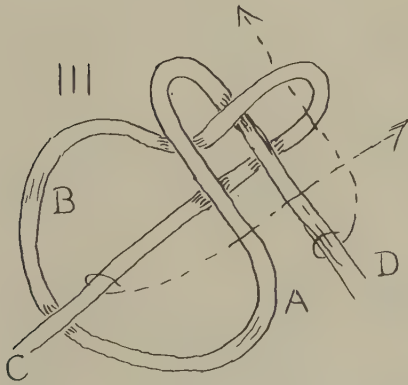
If the four parts
A-B-C-D
of Fig. I
are crowned
Figs. II-IV



The
result will be



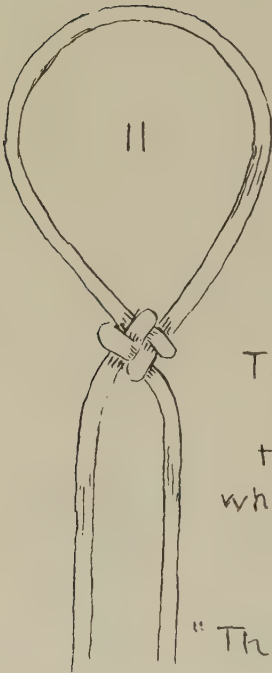
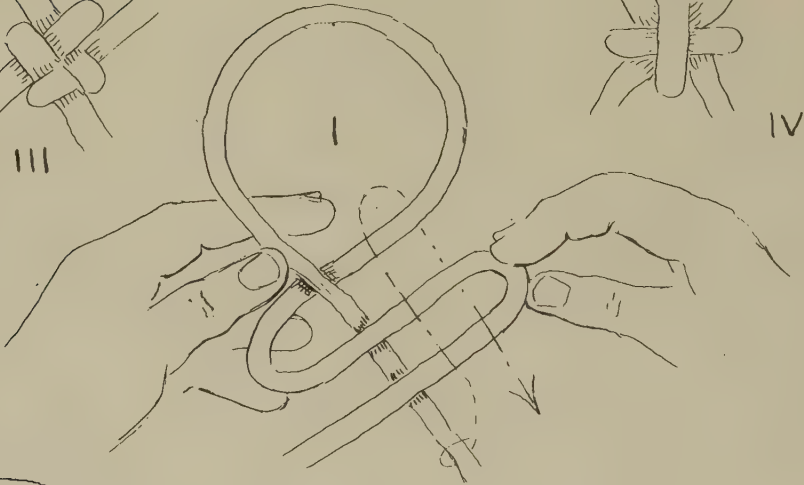
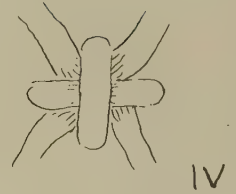
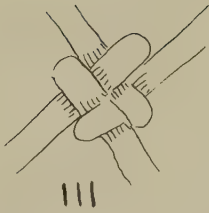
the
Japanese
Crown Knot Fig V



of which
the front and back
Figs. VI, VII



are respectively a square and a
cross

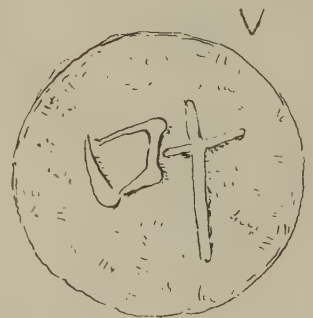
ANOTHER METHOD

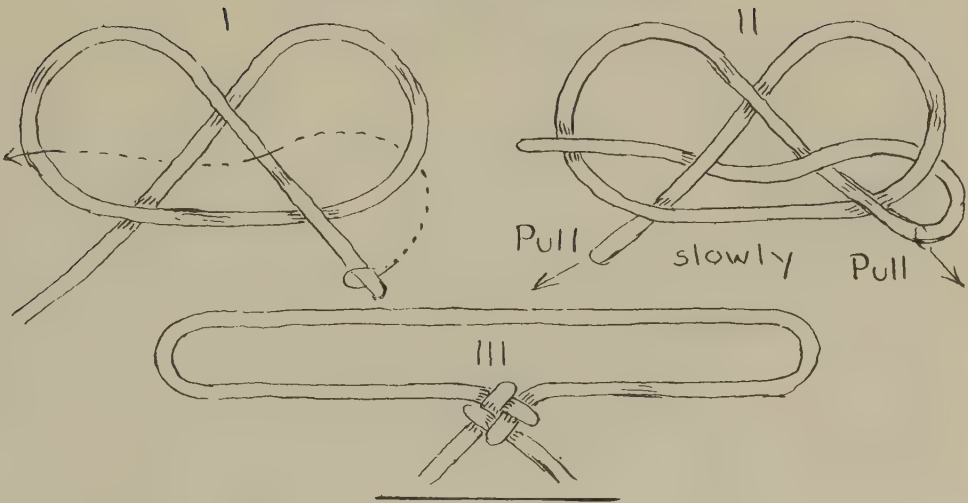
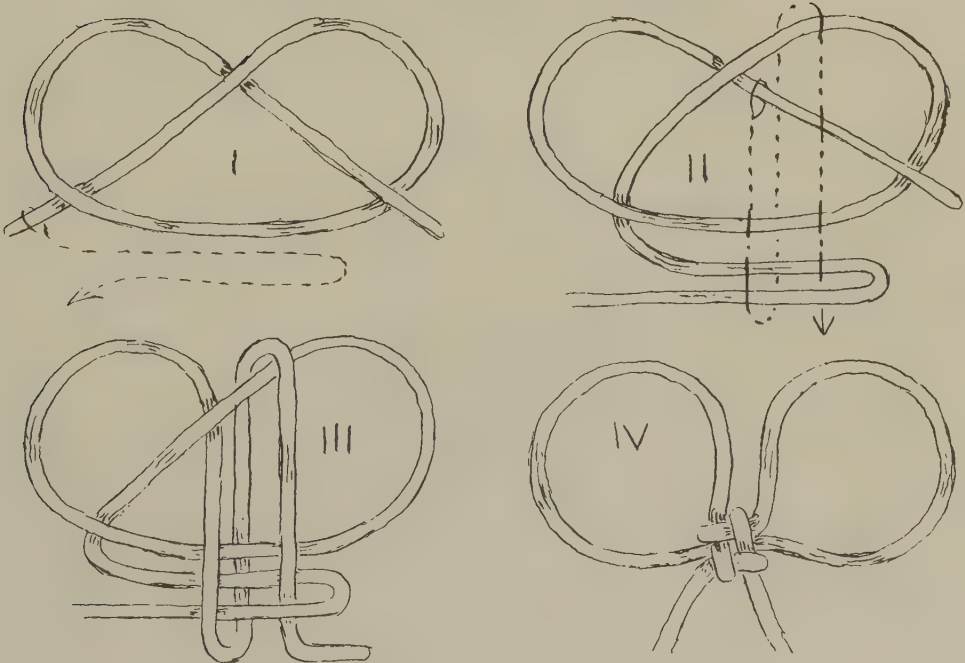
In the museum in Salem, Mass,
where many Japanese knots are shown,
this knot is labelled
the

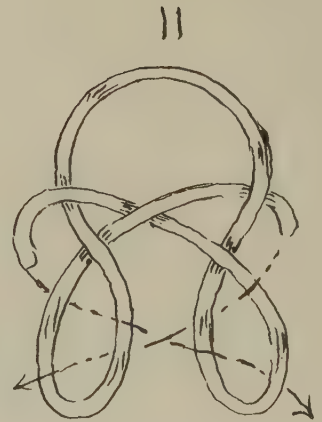
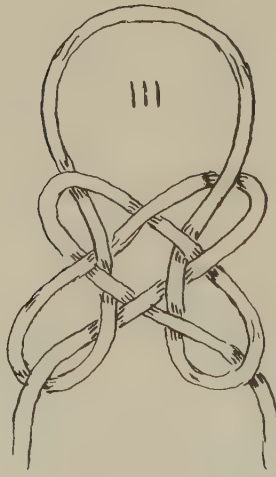
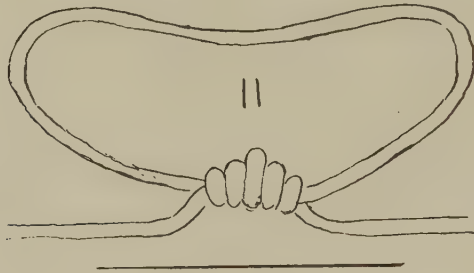
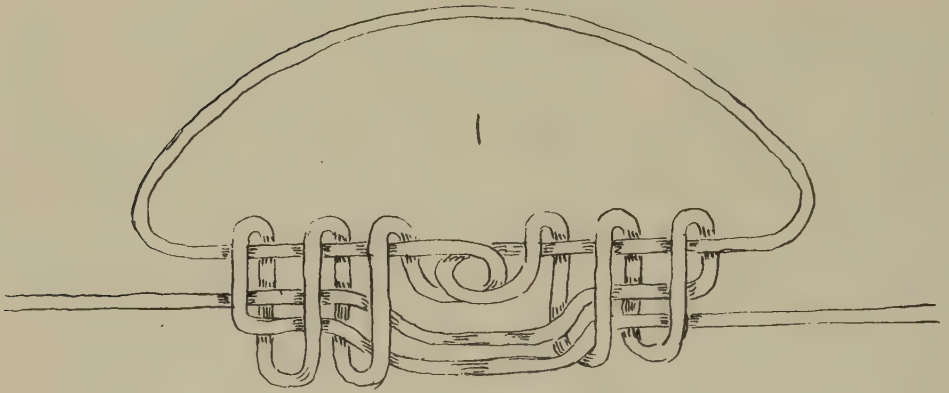
SUCCESS KNOT

The square Fig. III
and
the cross Fig. IV,
when combined, Fig. V,
form the word
KANAU

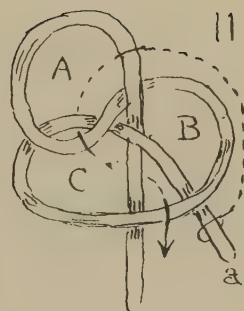
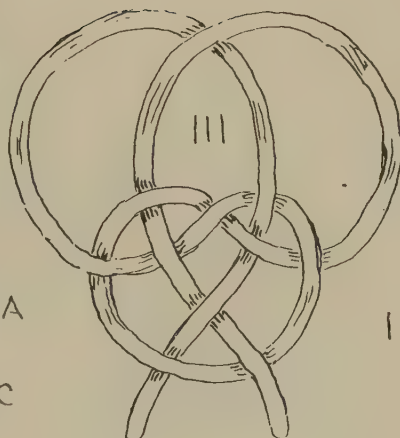
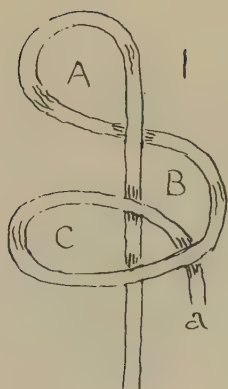
"The wish realized"



ANOTHER METHODDOUBLE SUCCESS KNOT

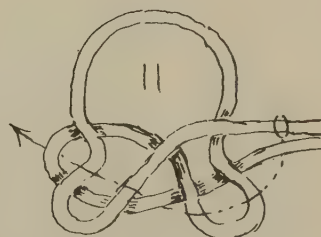
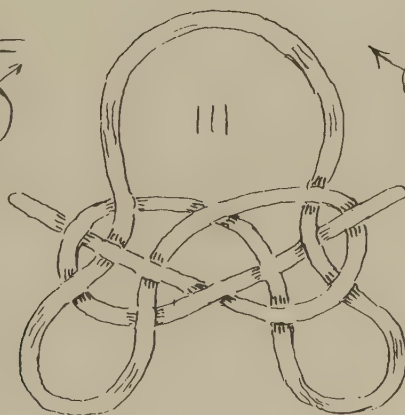
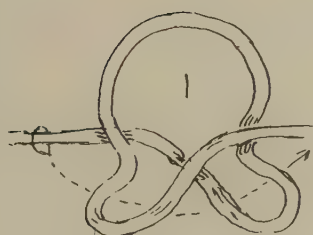
JAPANESE KNOTS

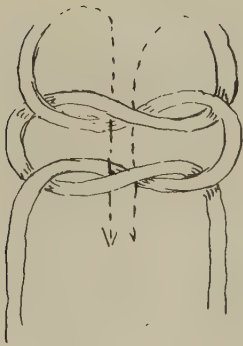
JAPANESE
KNOTS



Lay the bight A
Fig. I
on the bight C
Fig. II

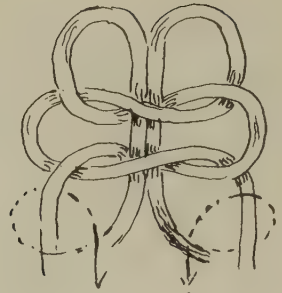
Interweave the
end-a-as
shown



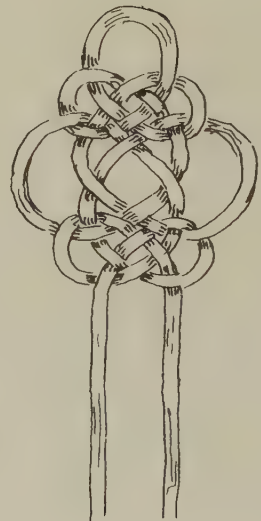
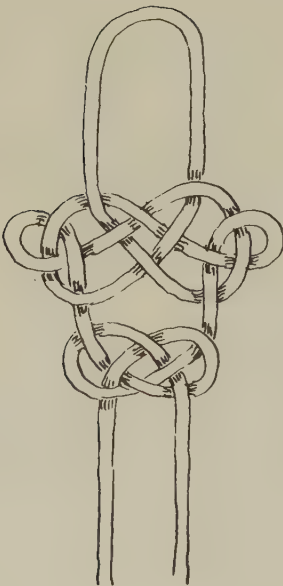
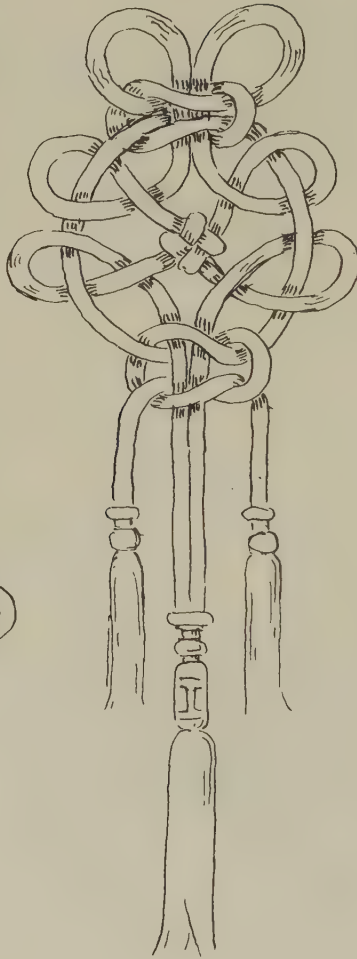
JAPANESE KNOTS

I

II

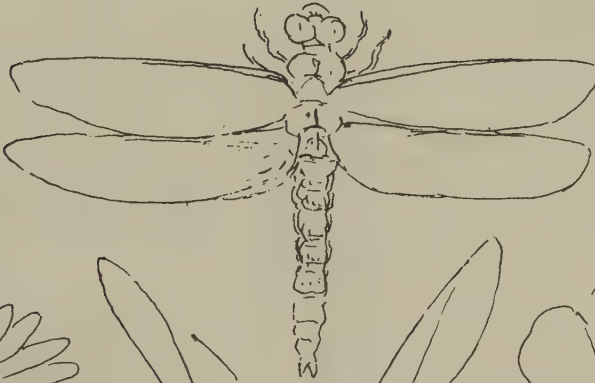
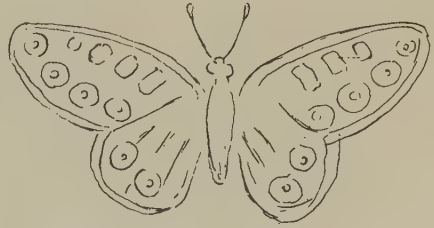


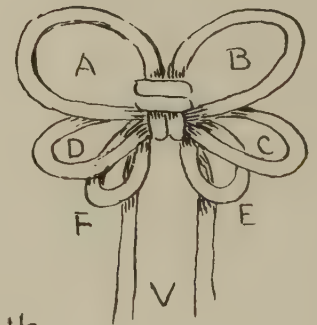
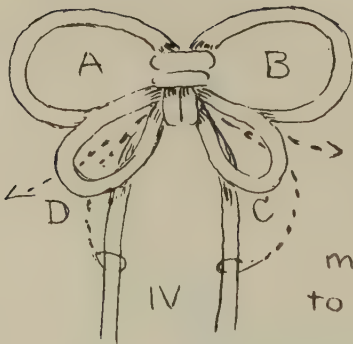
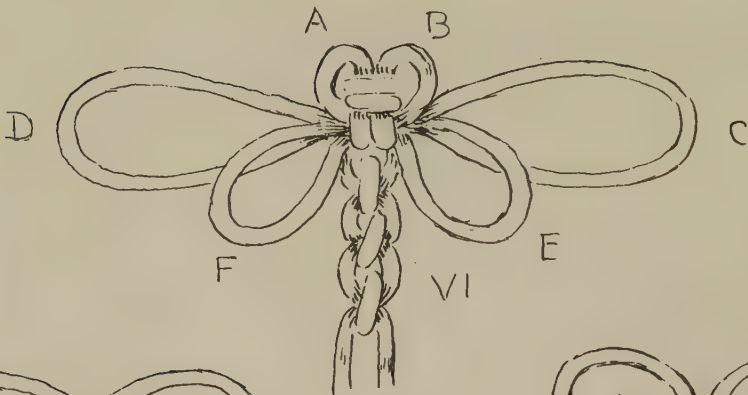
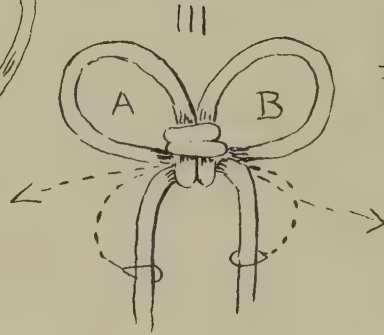
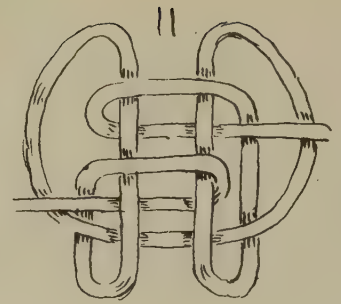
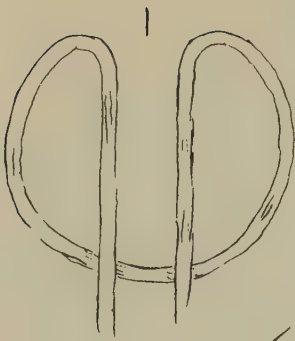
III



ORIENTAL KNOTS

Suggesting the outline of Flowers and
of Insects &c



BUTTERFLY

The
six loops
A-B-C-D-E-F
Fig.V
may be adjusted
to correspond with
Fig.VI

BUTTERFLY

Fig 1-a

The Double-triangular Knot, page 171.

Its parts may be adjusted

to form Fig 1-b

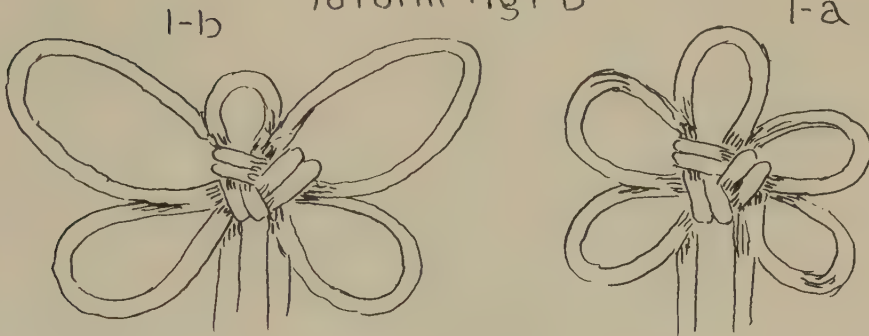


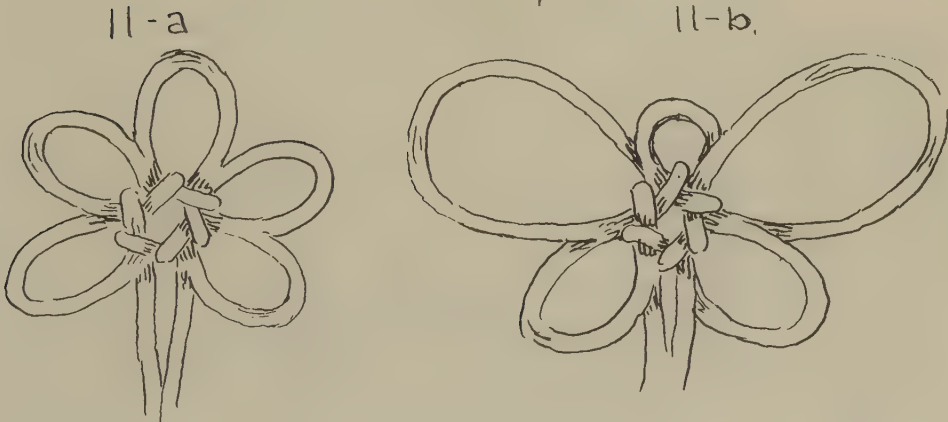
Fig. 11-a

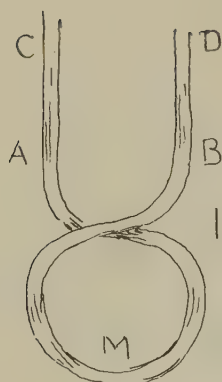
The Hexagonal Knot, page 176.

Its parts may also be adjusted

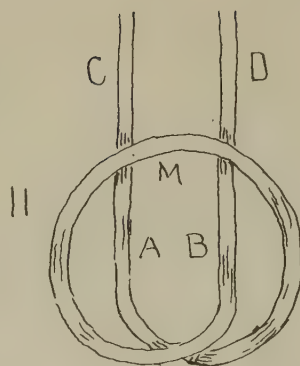
to form

a Butterfly Knot



RABBIT'S HEAD

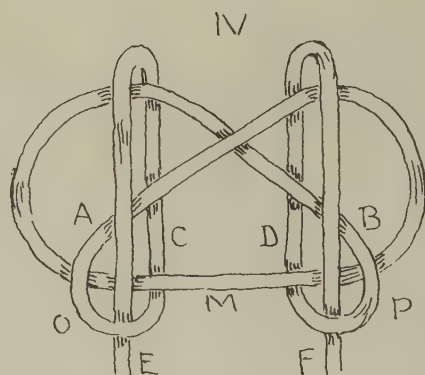
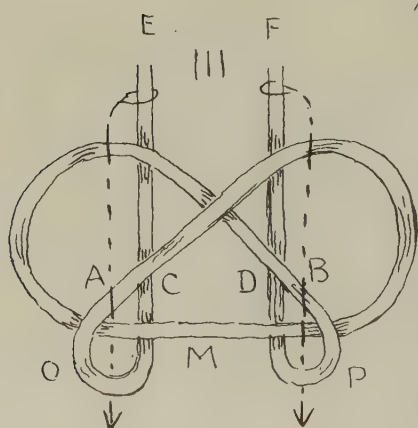
Turn M
over upon
A-B
Figs. I and II



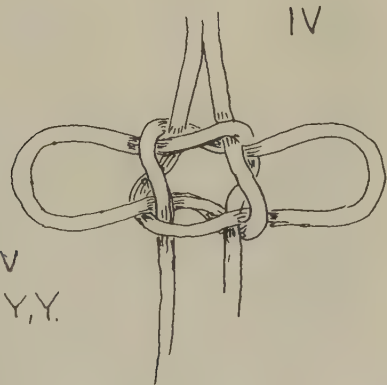
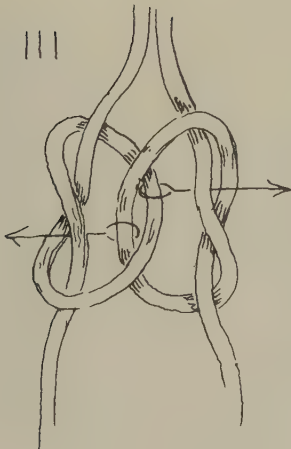
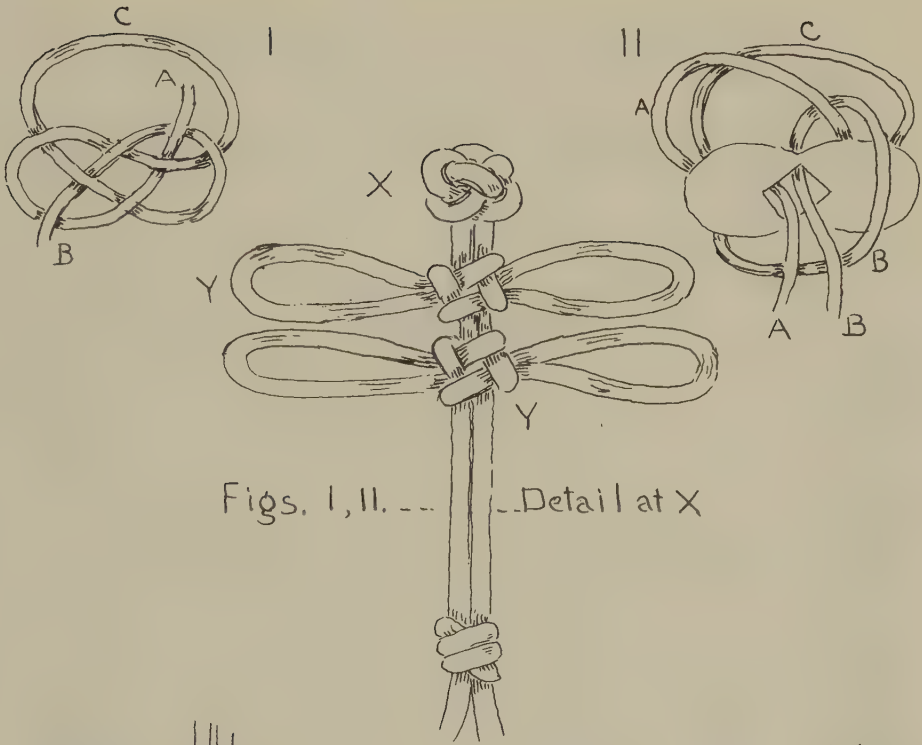
Turn M and A-B
of Fig II
over and upon
C-D
as in Fig. III



Pass the ends
E & F
through the bights
O & P



THE DRAGON FLY



Figs. III, IV
Detail at Y, Y.

INSECT

In the Museum in Salem Mass.
are two Japanese Knots with the label
I "Insect"



One of them, Fig I, is a

three-strand Sennit, page 72
and probably represents an

EARTH WORM

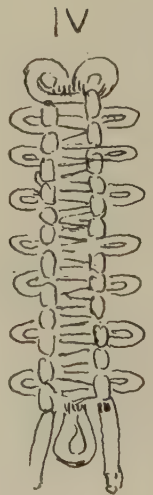
The other, Fig. II,
is a combination of two
Macrame' Square Knots,
see page 128,
and may possibly represent a

BEETLE

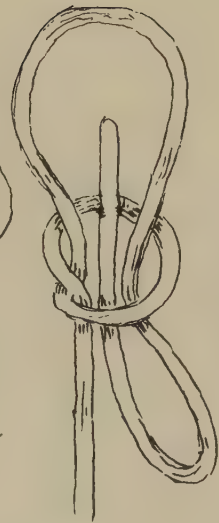
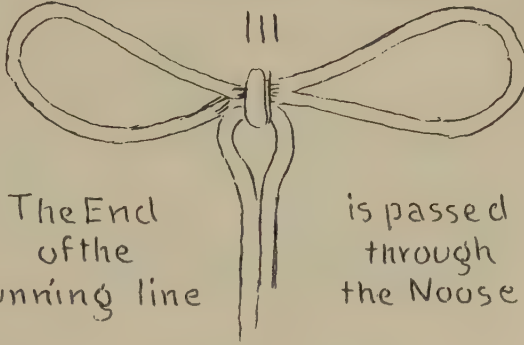
Fig. II suggests a method
for tying a

CATERPILLAR

Fig. III is a series of Square
Knots & spaces
around two idle lines on which
the knots are free to run,
By sliding the
Knots together, Fig. IV is
the result



MODIFICATIONS
of the
Overhand Noose



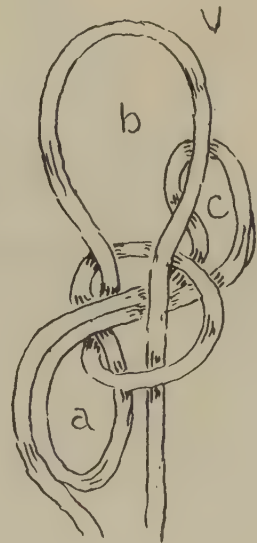
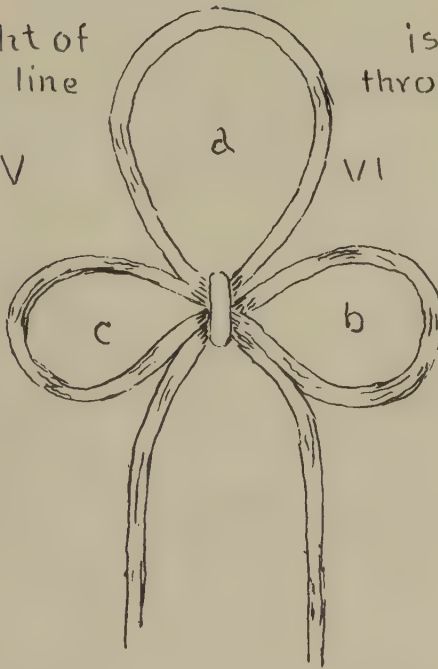
The End
of the
running line

is passed
through
the Noose

TREFOIL

The Bight of
the fixed line

is passed
through the Noose



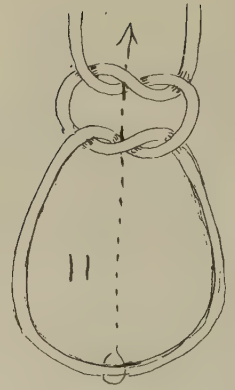
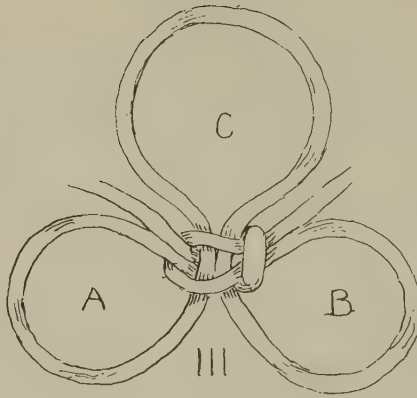
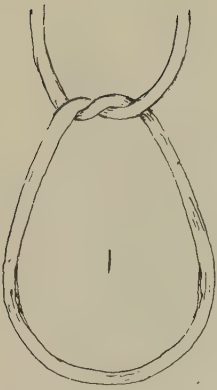
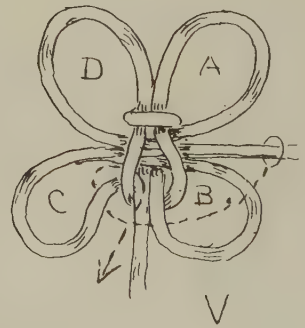
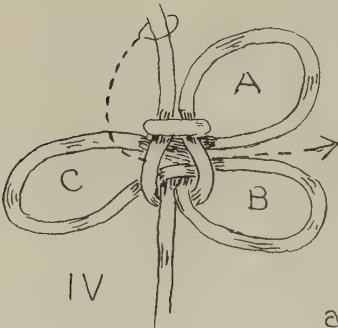
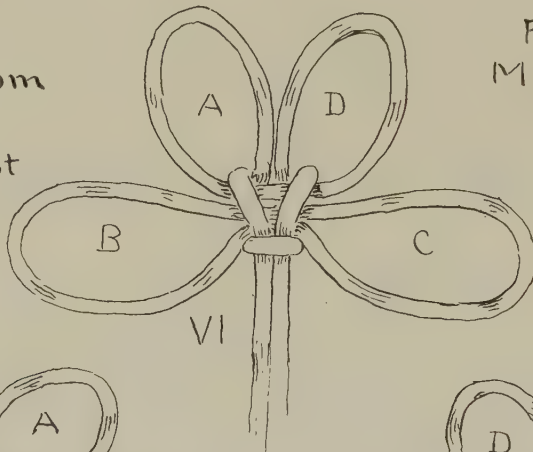


Fig. I - III
Flower from
a
Square Knot

Fig. IV - VI
Modification
of
Fig. III



Figs. IV & V
are the reverse
side

FLOWER KNOT

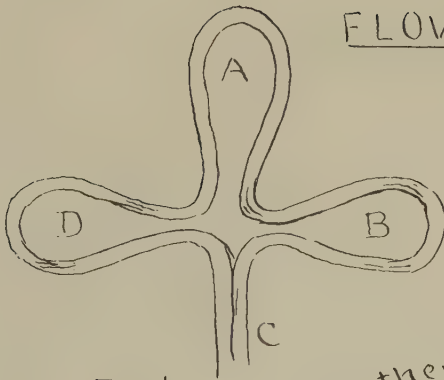


Fig. I
Position
of
the strands

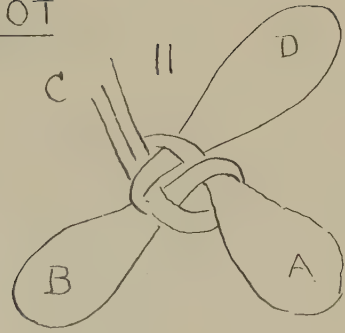


Fig. II
Crowning
the
four parts

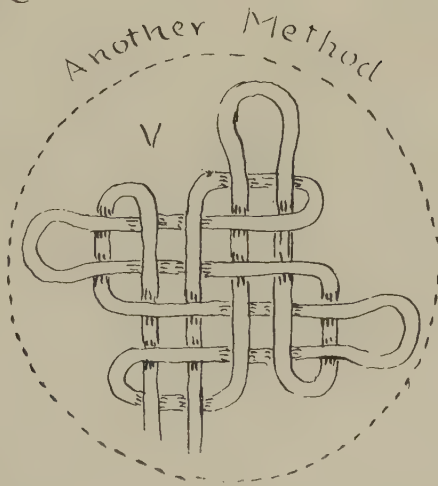
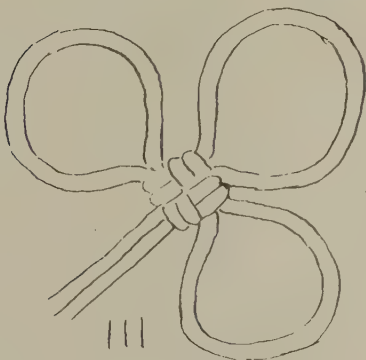
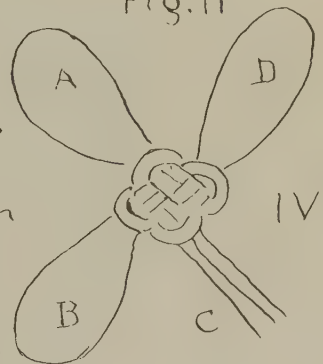


Fig. III
Flower
of
three petals

Fig. IV
Reverse side
of
Fig. II



For Flowers
of
seven & Eleven
petals
see
next two pages



FLOWER. KNOTS
of
7 petals

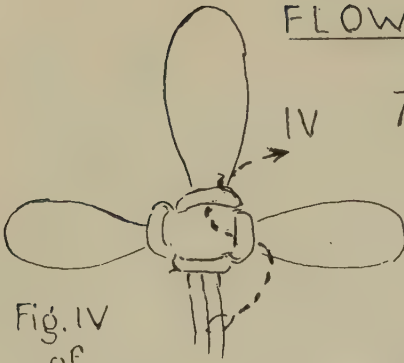
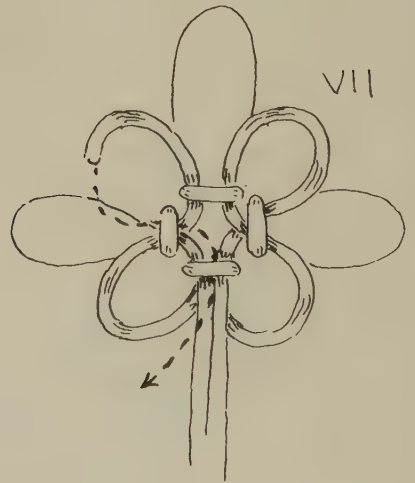
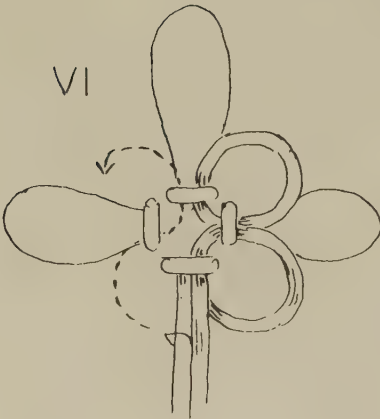
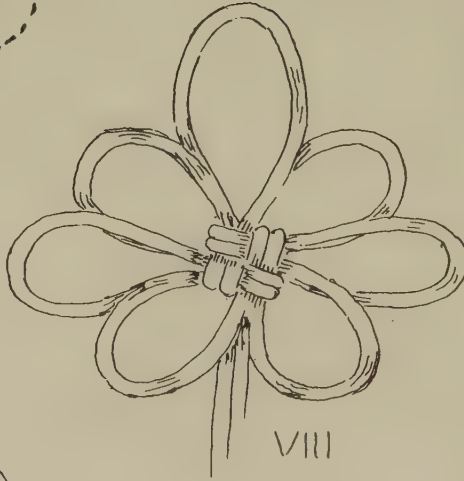
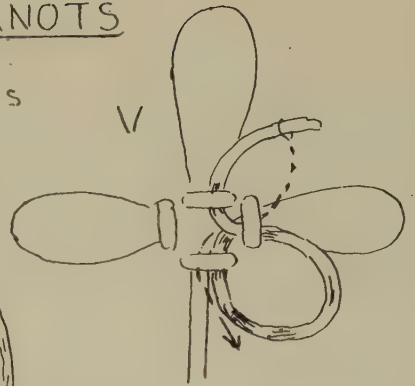
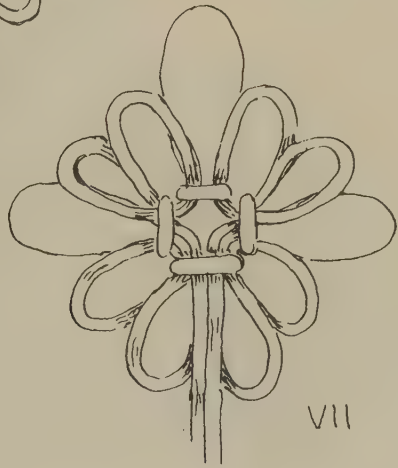
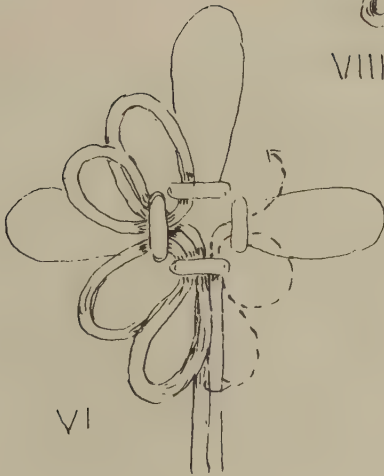
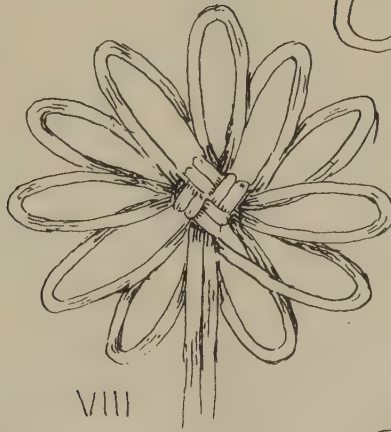
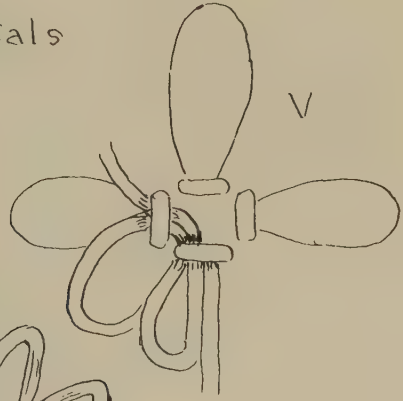
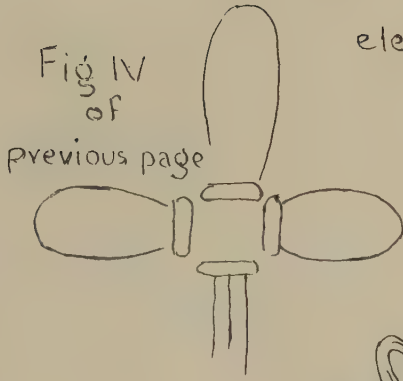


Fig. IV
of
previous page

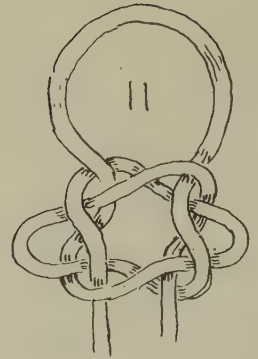
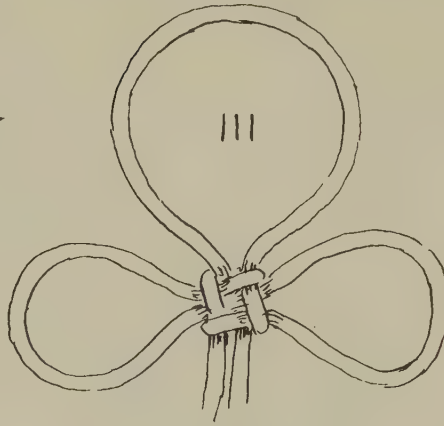
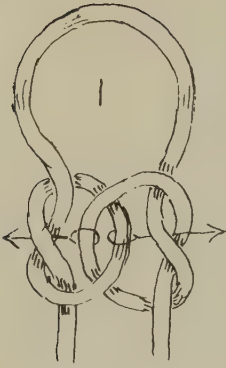


CHRYSANTHEMUM

of
eleven petals



FLOWER of 3 Petals



FLOWER of
5 Petals

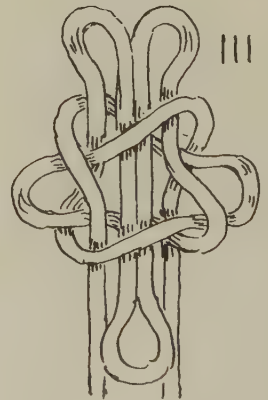
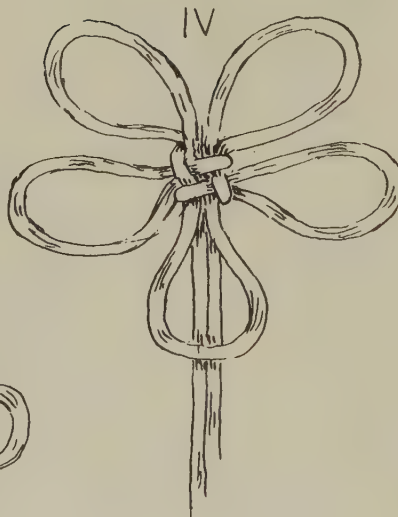
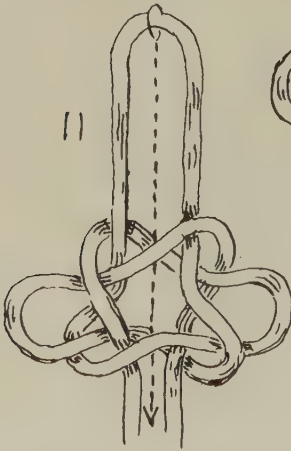
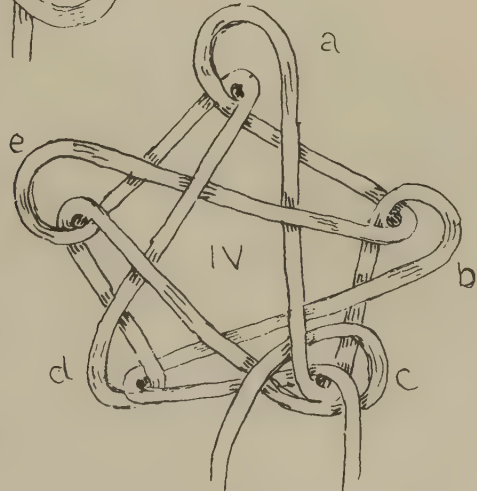
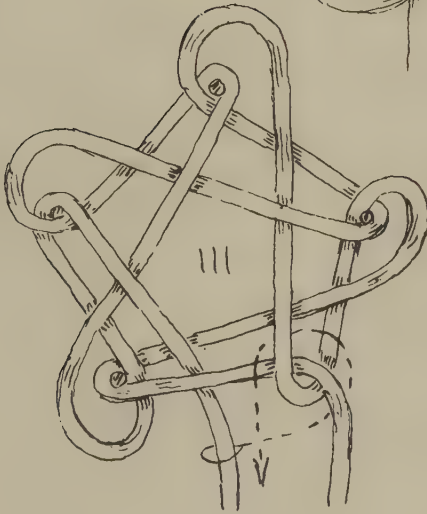
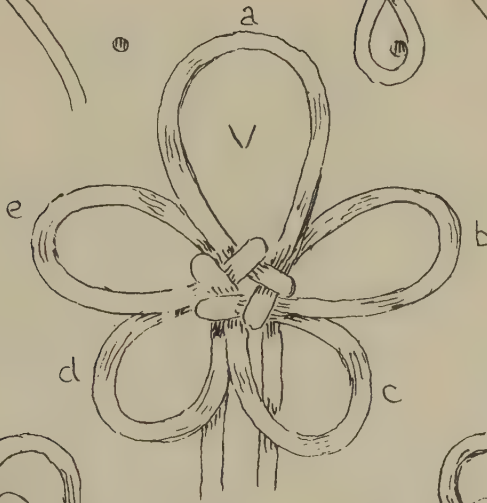
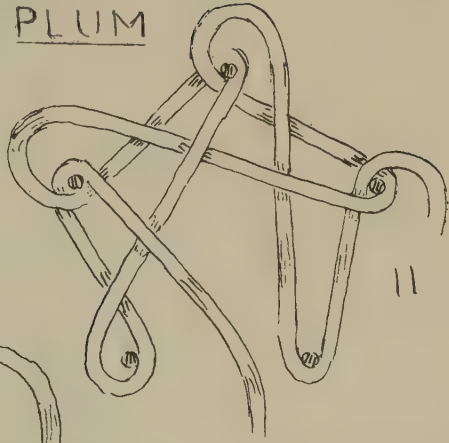
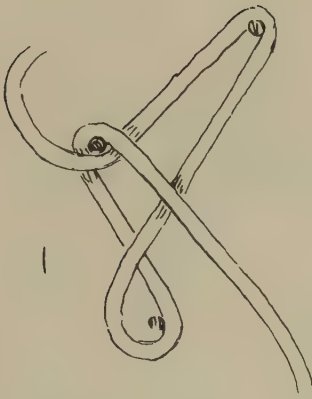
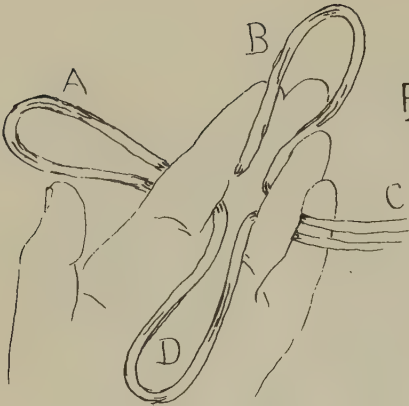


Fig II above

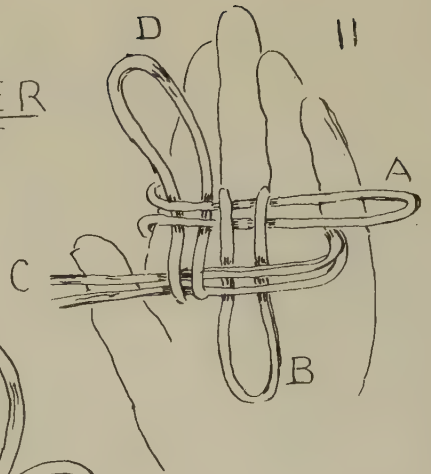
FLOWER
OF THE PLUM



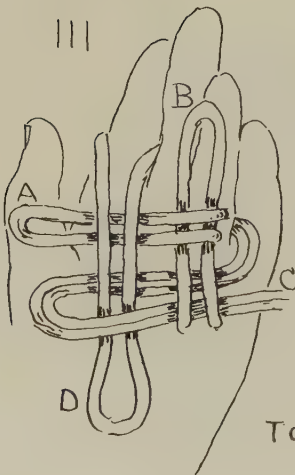
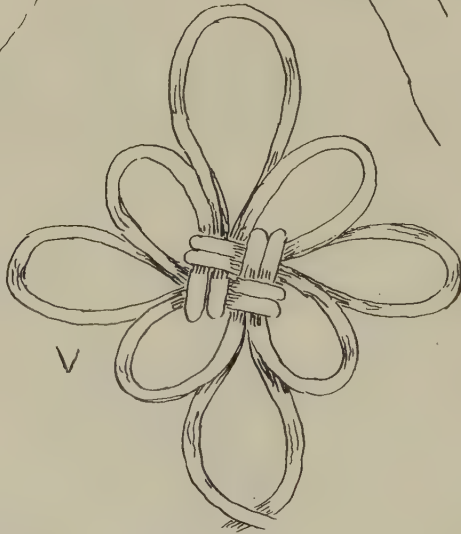
FLOWER KNOT



Arrange the
strands
as shown in
Fig. I

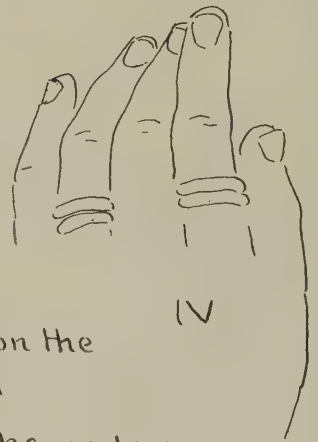


Crown the four
parts, A, B, C, D
Fig. II
from right to
left



A, B, C & D
are again crowned
from left to right
Fig. III.

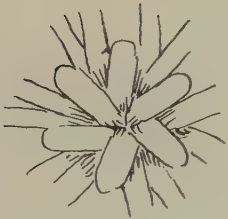
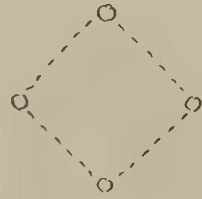
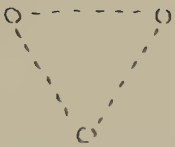
Fig. IV shows the
lay of the strands on the
back of the hand



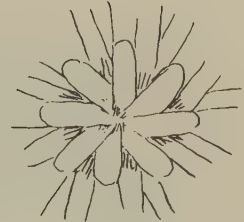
To avoid confusion the under
strands of Fig. III are omitted.

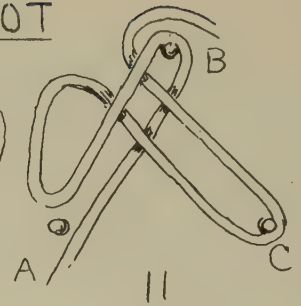
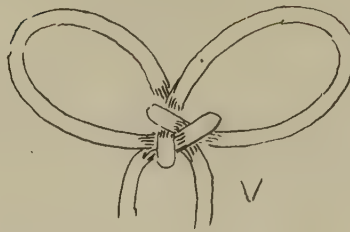
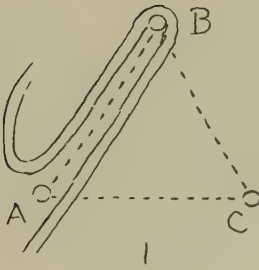
POLYGONAL KNOTS

These Knots are
probably
of Chinese origin
They may be tied with the aid of
pins
placed at the angles
of
a triangle, square, pentagon
or other regular
polygon

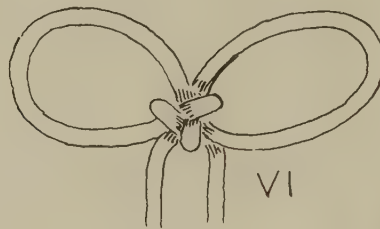
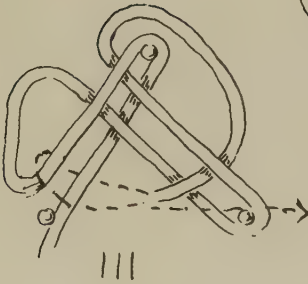


The radiating
strands
at the center of the knot
are double.
There is a top and bottom
layer
which are alike

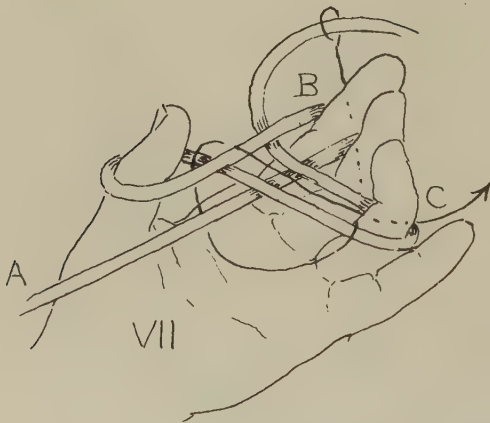
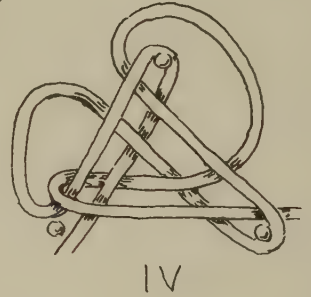


TRIANGULAR KNOT

Front



Back



This Knot
may be tied on the
fingers of the
hand

Fig VII corresponds
with
Fig II above

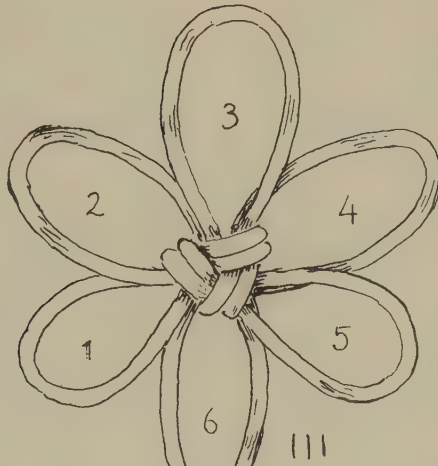
DOUBLE TRIANGULAR KNOT



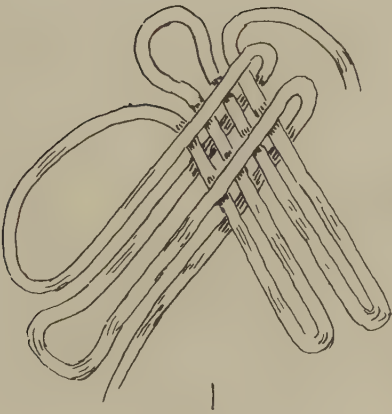
Front



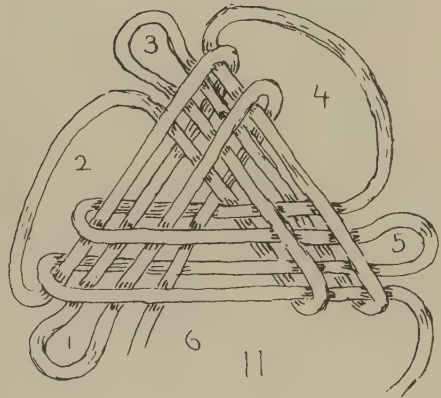
Back



III

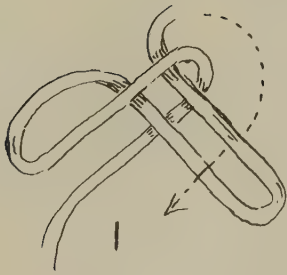


I

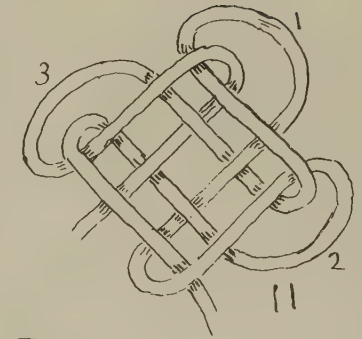
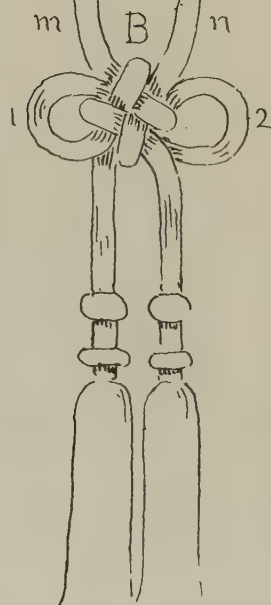
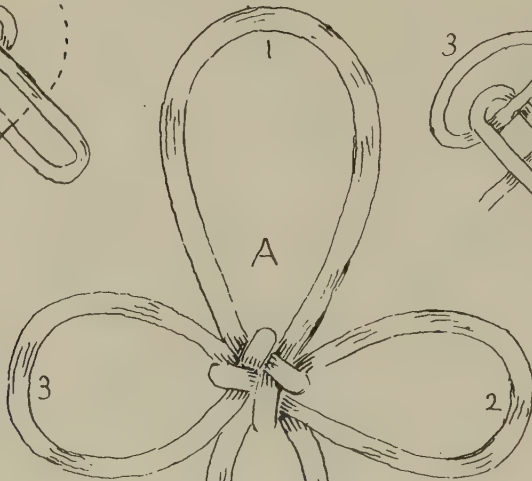
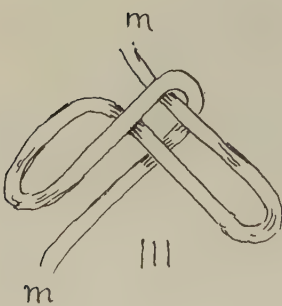


II

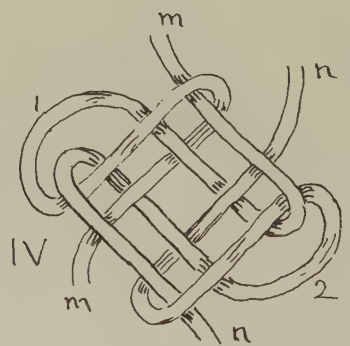
SINGLE
QUADRANGULAR - KNOT



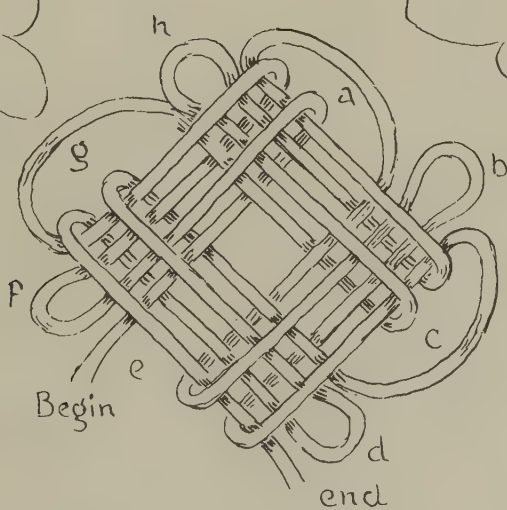
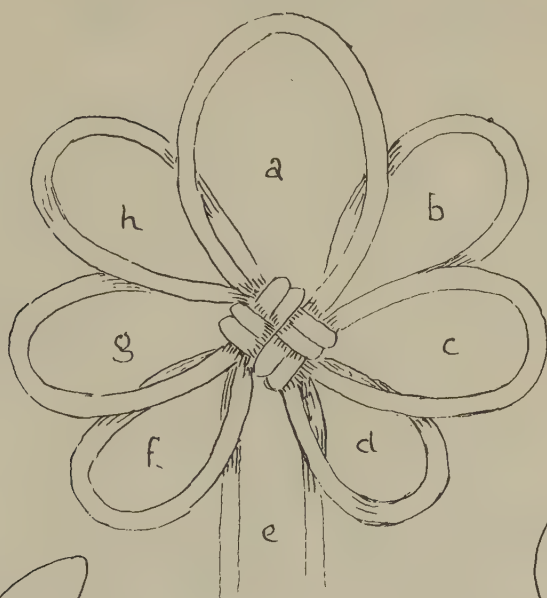
Figs. I, II
Detail of Fig. A
tied with
a single line



Figs. III, IV
Detail of Fig. B
tied with
two lines m & n



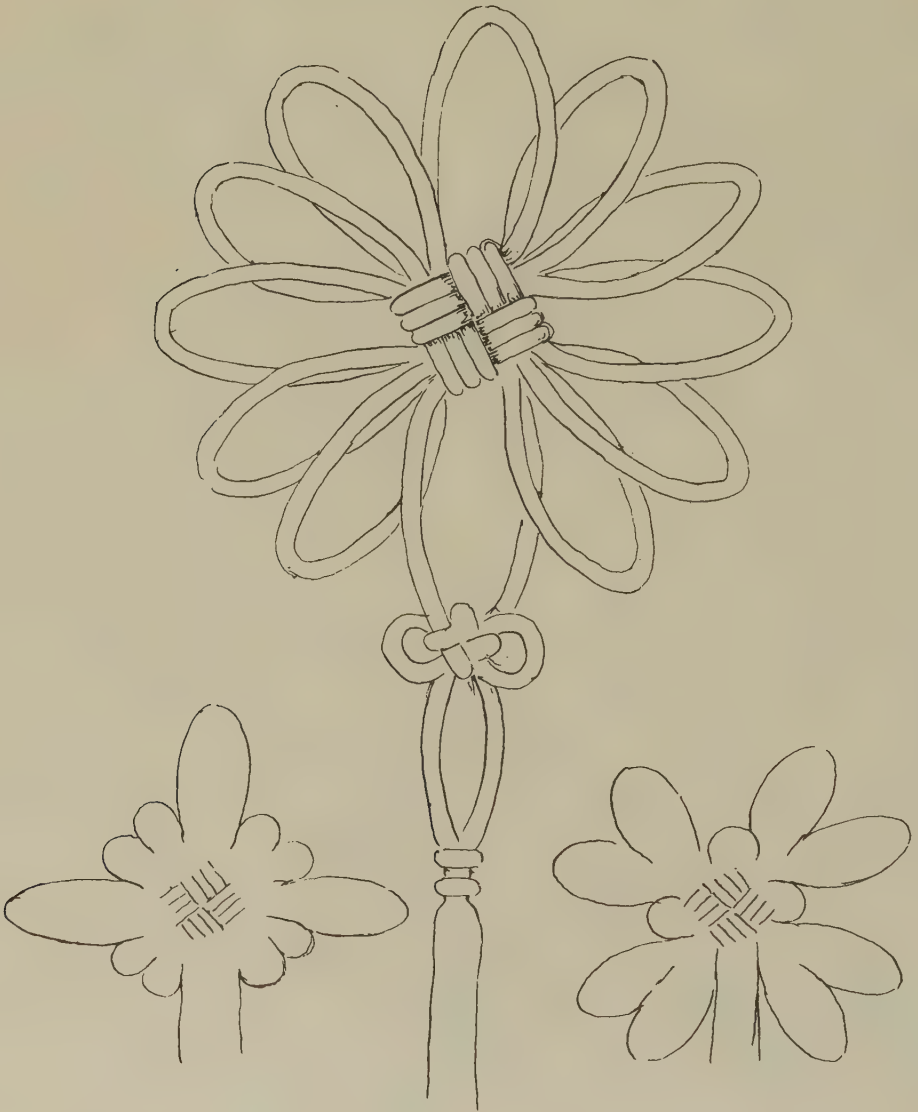
173
DOUBLE
QUADRANGULAR-KNOT



174

TRIPLE

QUADRANGULAR - KNOT



175

DETAIL

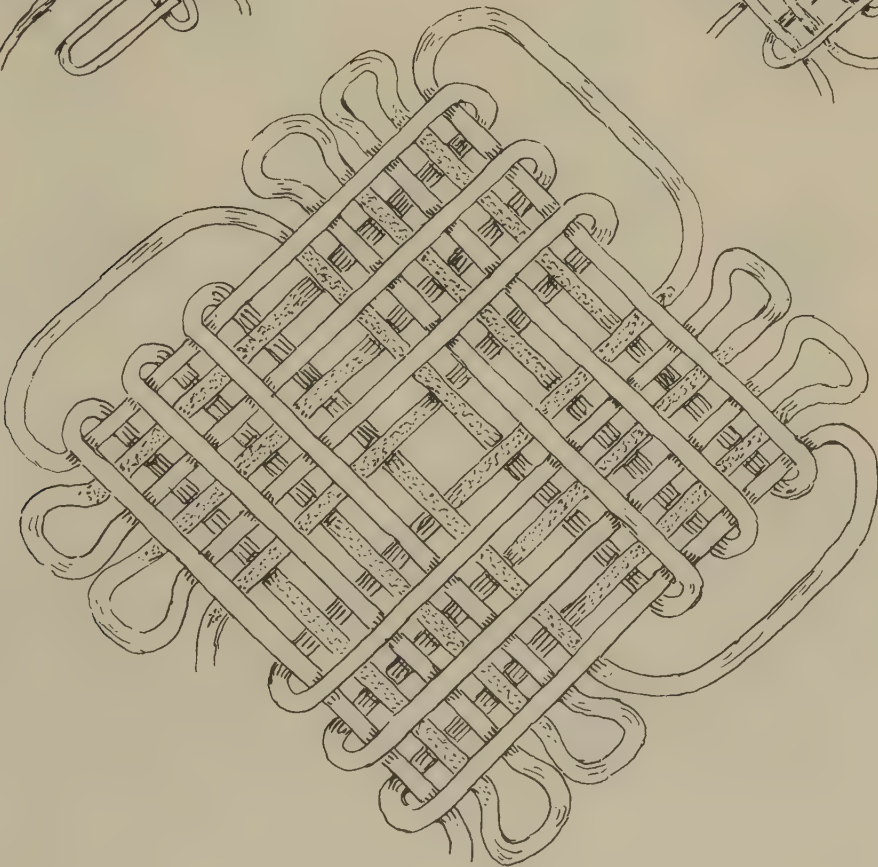
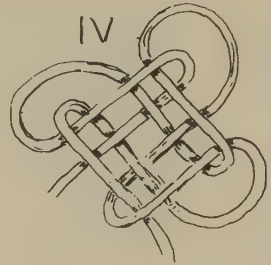
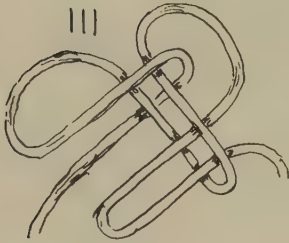
of the

Triple Quadrangular-Knot

The method is the same as that of the
single form

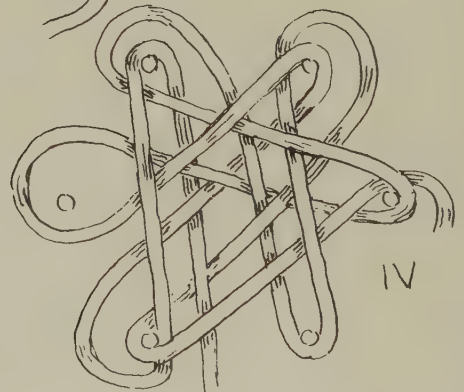
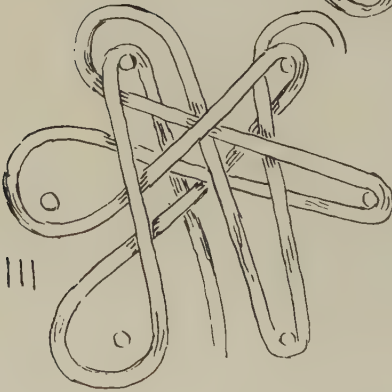
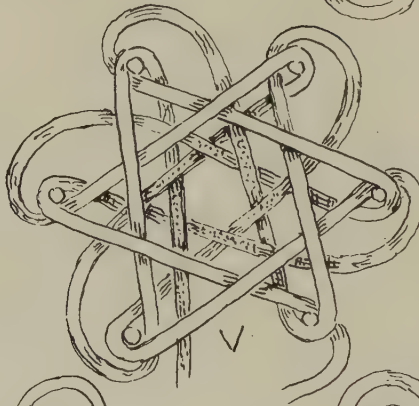
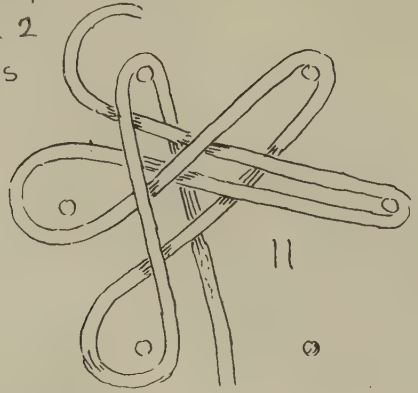
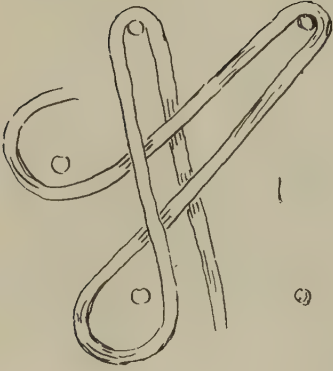
Figs. I, II, III and IV

But with the loops in 3's



HEXAGONAL KNOT

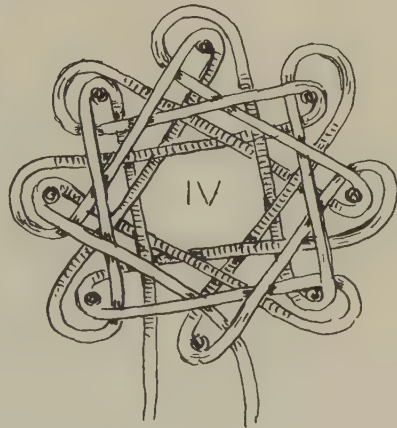
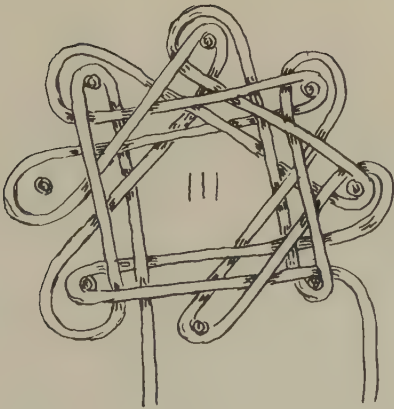
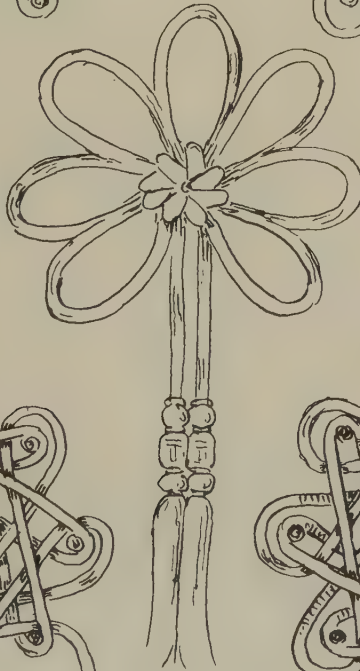
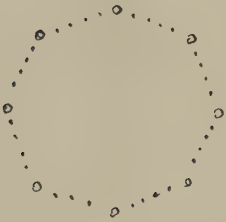
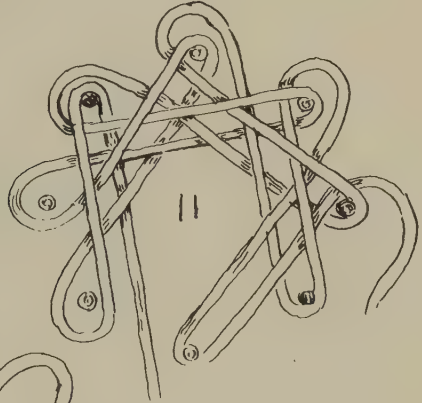
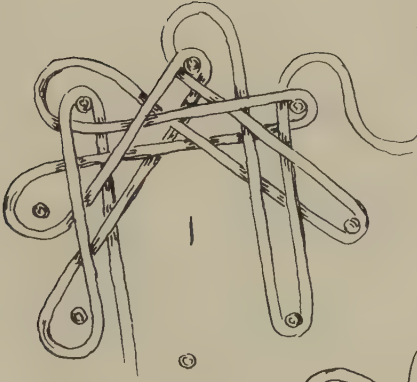
Each Bight passes
through 2
Loops

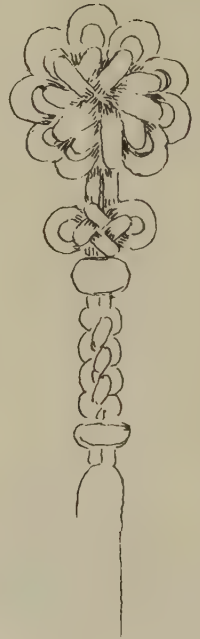


177

OCTAGONAL KNOT

where
each Bightpasses
through 2
Loops

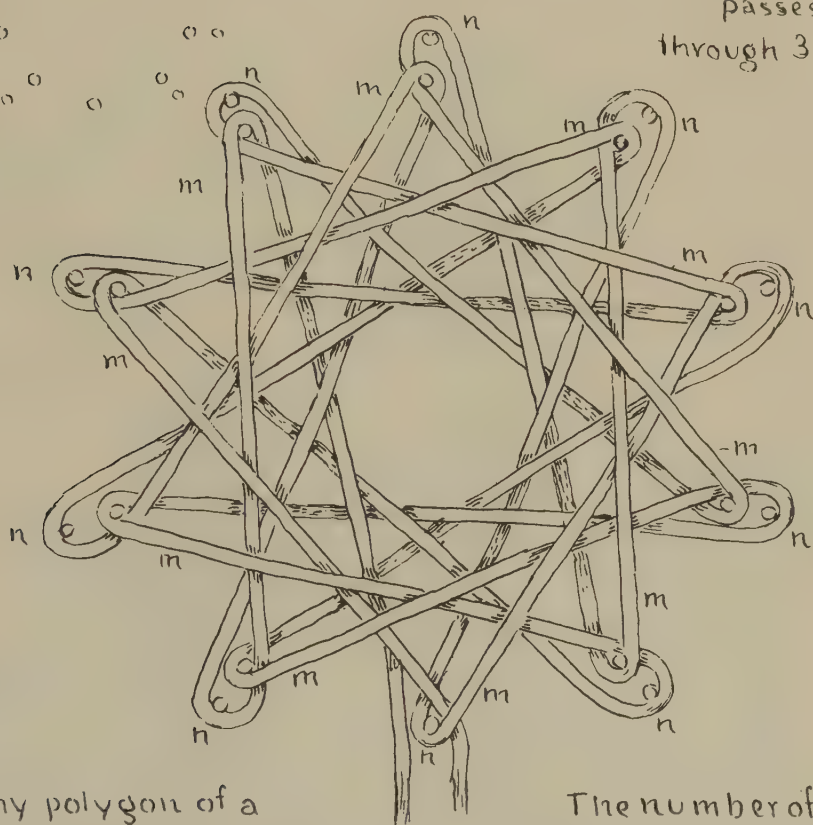


DECAGONAL KNOTDODECAGONAL KNOT

DECAGONAL KNOT

Detail

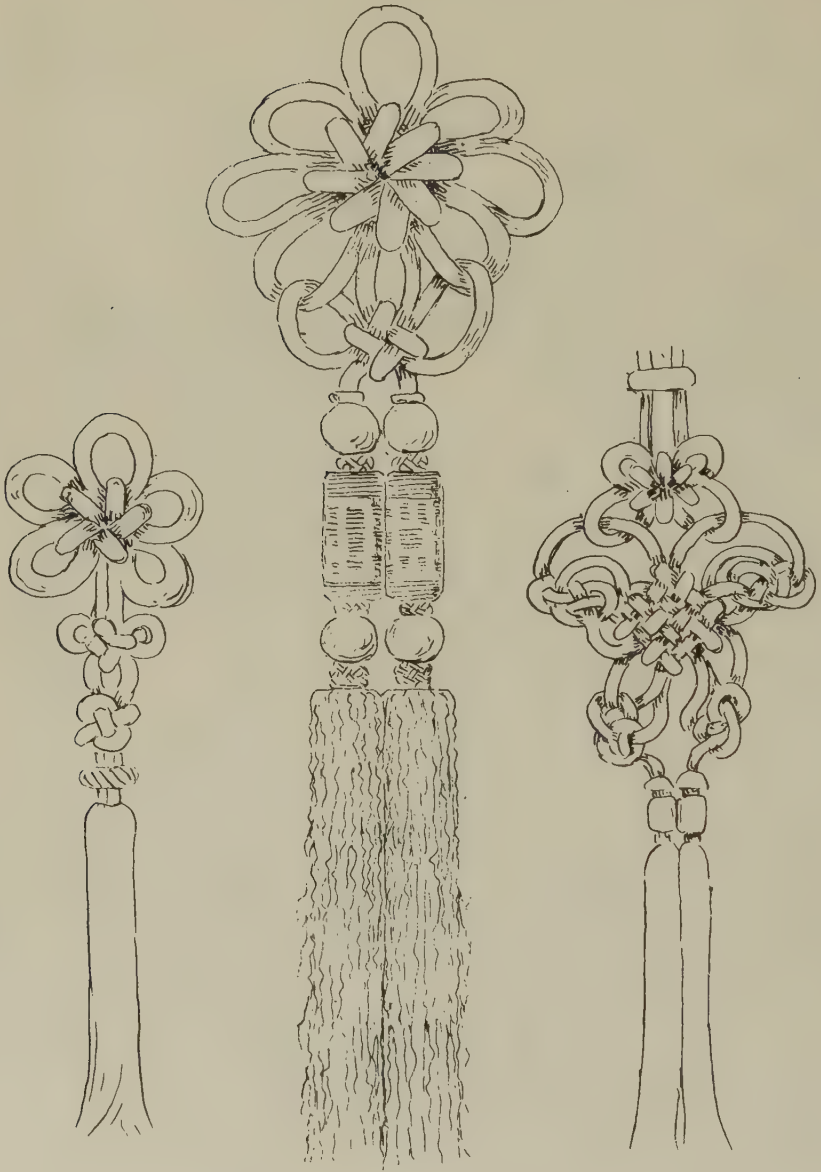
Each Bight
passes
through 3 Loops



Any polygon of a
convenient number of
angles may serve as a
foundation for this Knot

The number of loops
through which each bight
passes must be less than
one half the number of angles

In adjusting the knot
release all the bights $m, m, m, \dots$
pull gradually and equally all the bights $n, n, n, \dots$

CHINESE TASSEL

DOUBLE INTERLACING

These Knots (probably Chinese)
are based on the
Quadrangular Knot
page 172

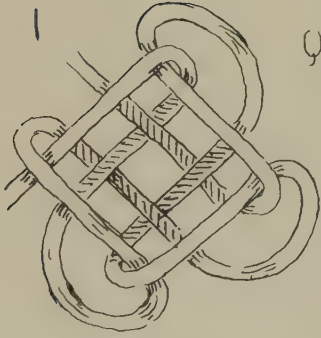
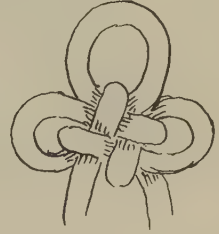


Fig. I shows
the upper and lower
strands,
the lower strands shaded



The number of strands in each layer may vary from
two to four, six or any convenient
even number

In the process of tying the knot, elaborations may
be introduced in which the Carrick Bend
appears, pages 185, 186, 188

A
diagram
with pins, that
correspond
with the number
of strands,
is necessary, also
pins to hold the strands

in place as the work progresses



A
cork board
6 or 8
inches square
is convenient for
this
and other intricate
Knots

Two distinct layers
Upper & Lower,
the lower layer
shaded

CHINESE
DOUBLE
BRAIDS

Fig. II
4 strands
wide

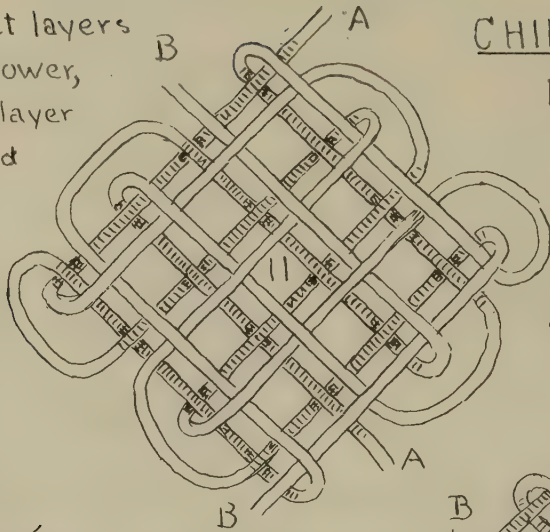
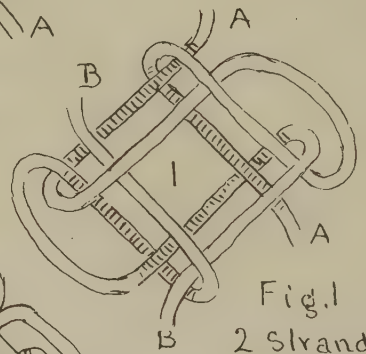
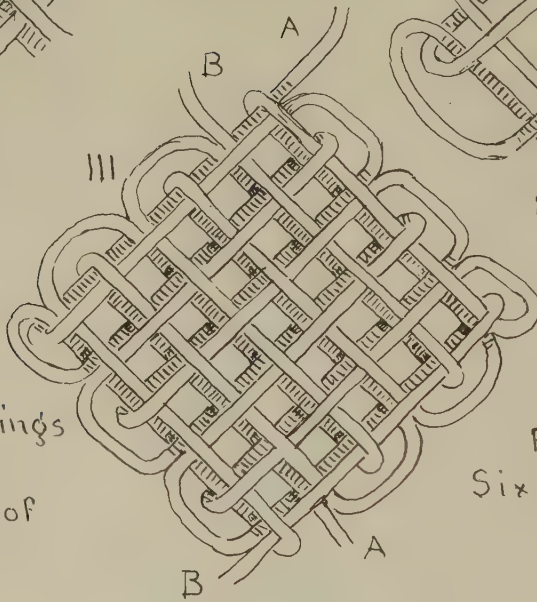


Fig. I
2 strands
wide



The interlacings
are the
repetition of
Fig. IV

Fig. III
Six strands
wide

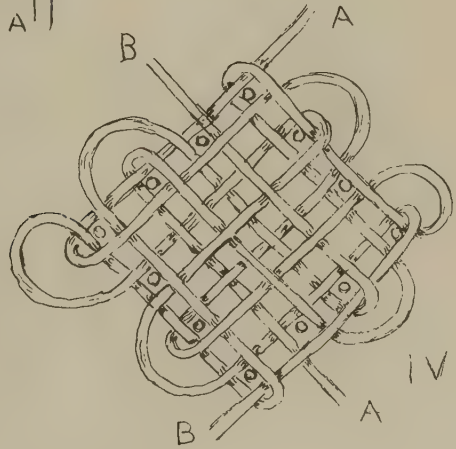
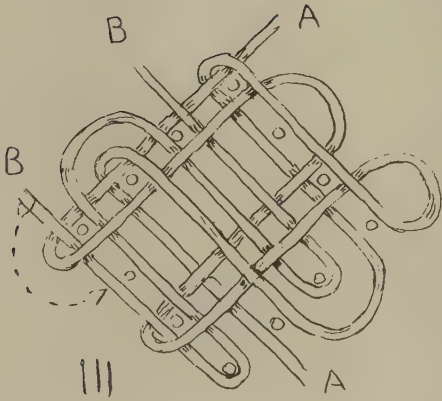
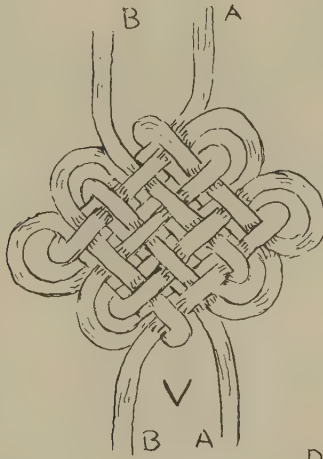
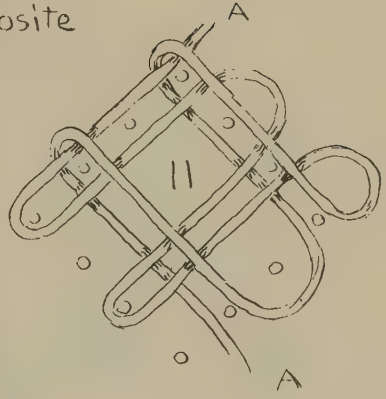
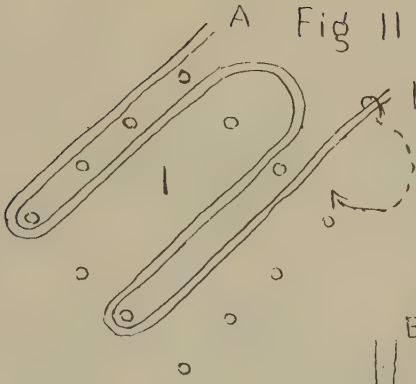


DETAIL

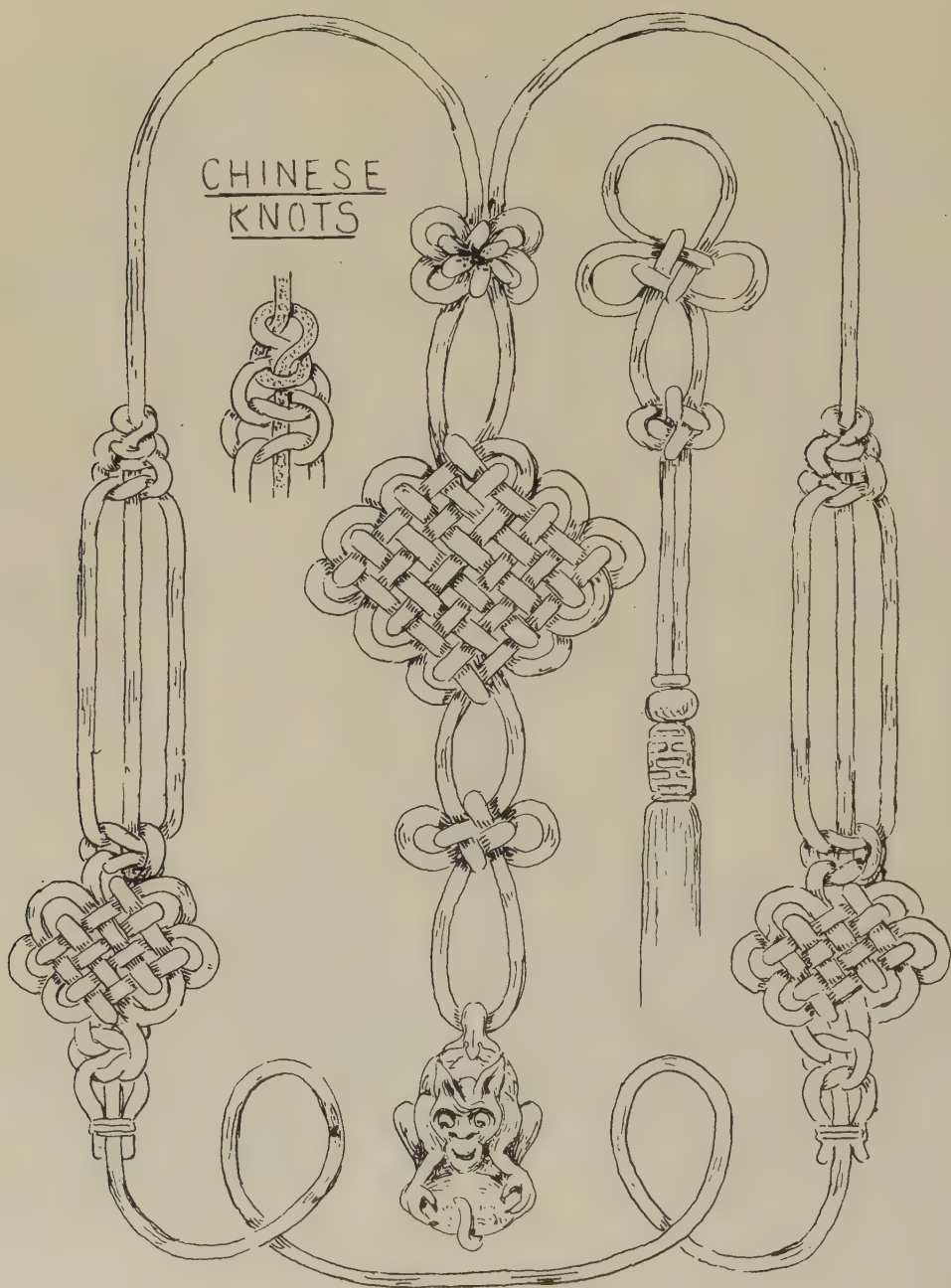
OF

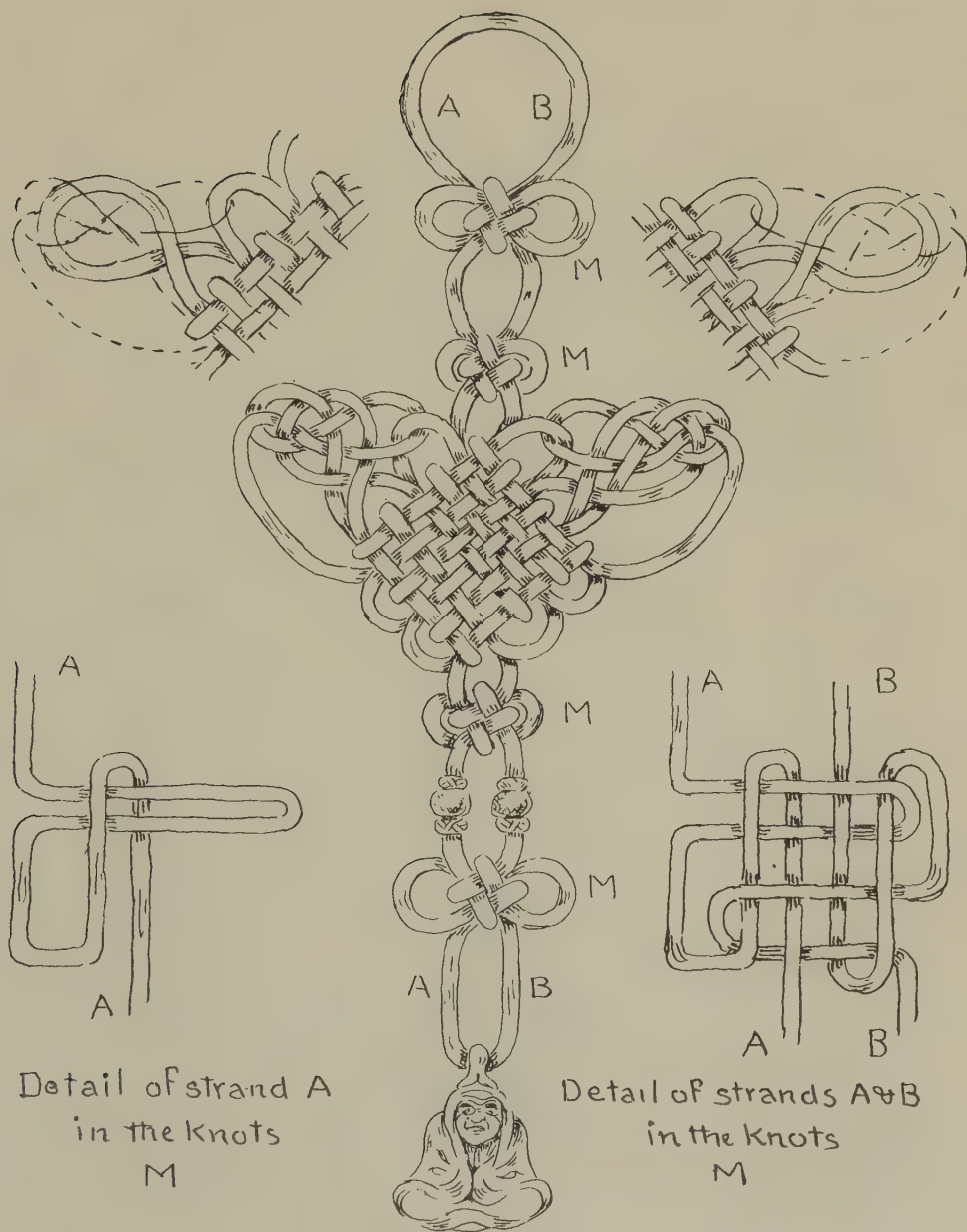
Fig II on opposite

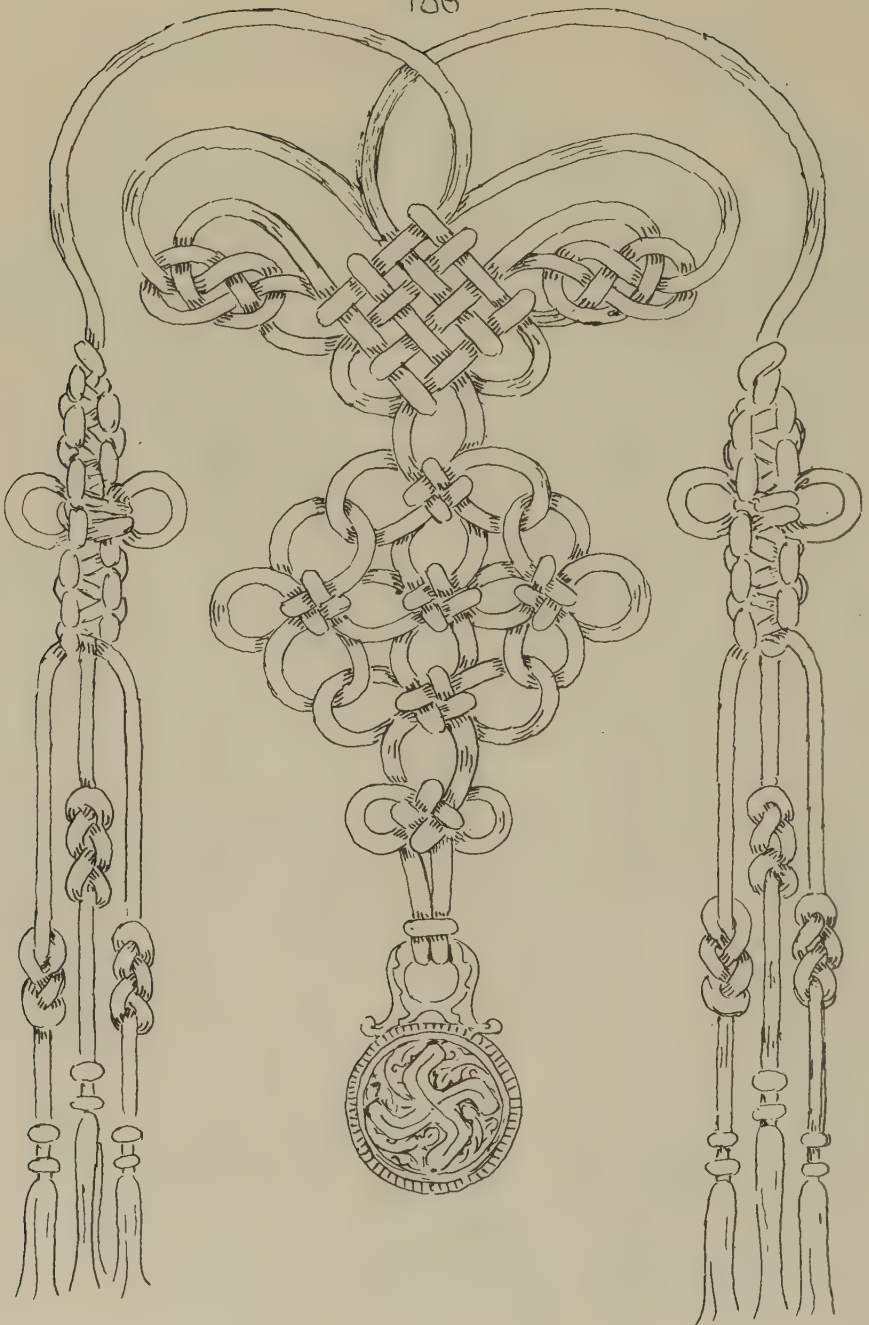
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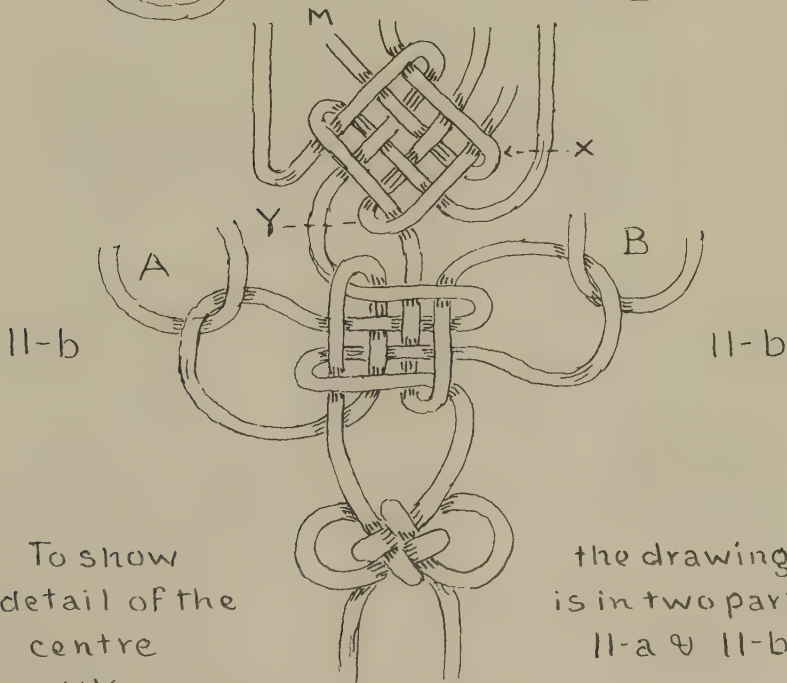
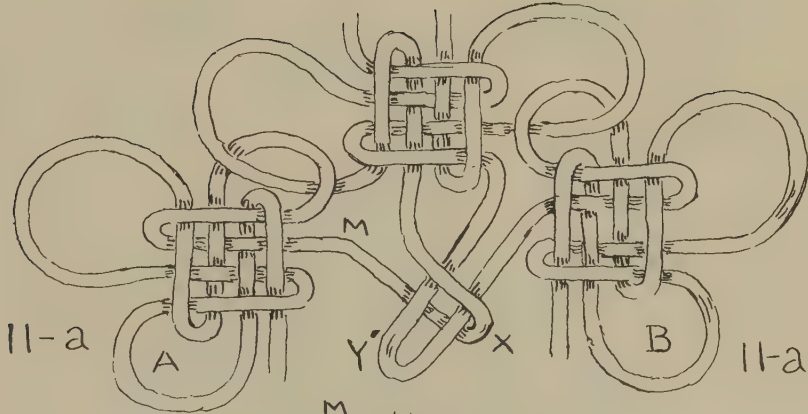


CHINESE
KNOTS





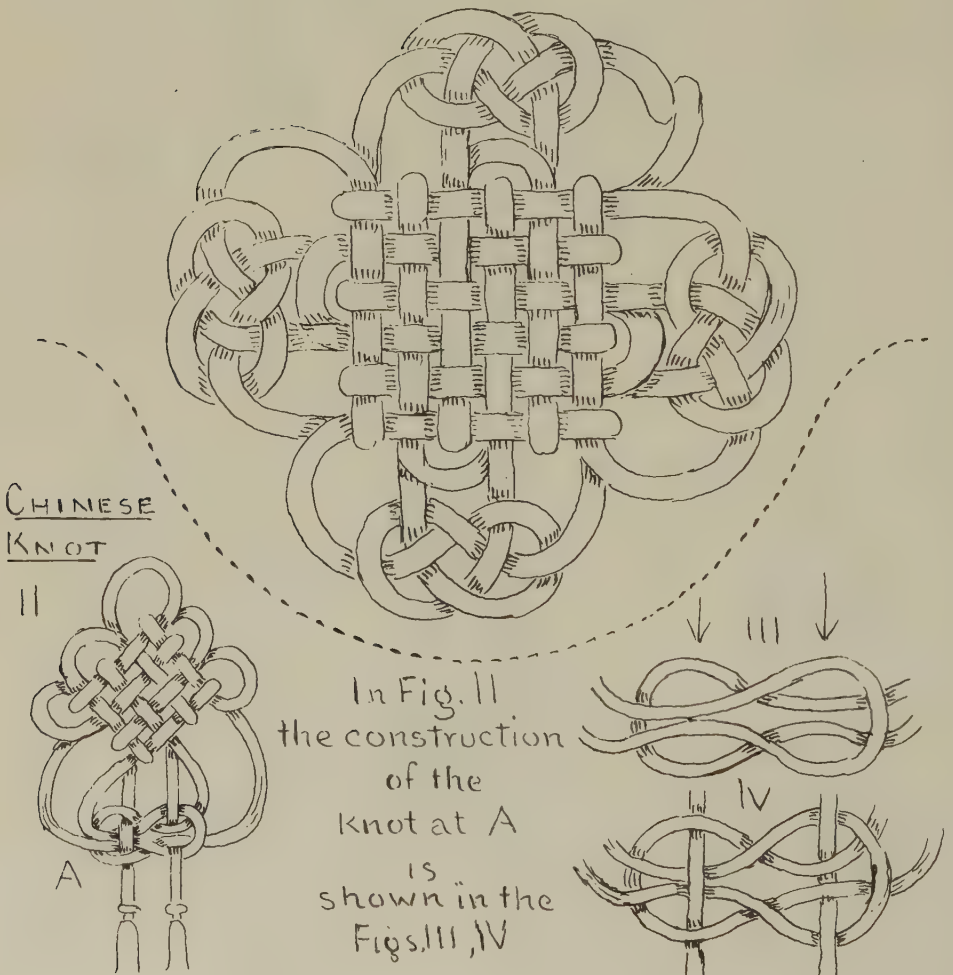


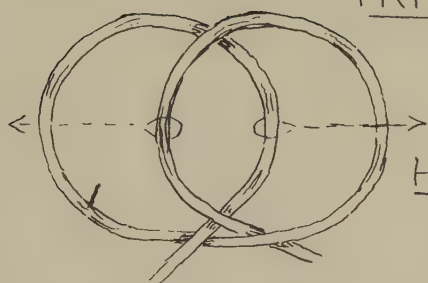
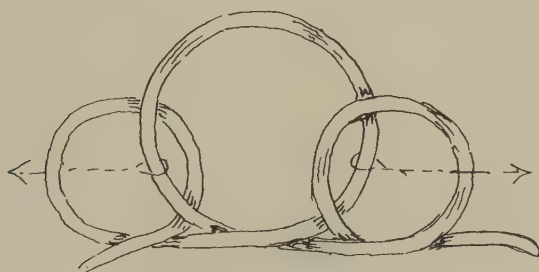
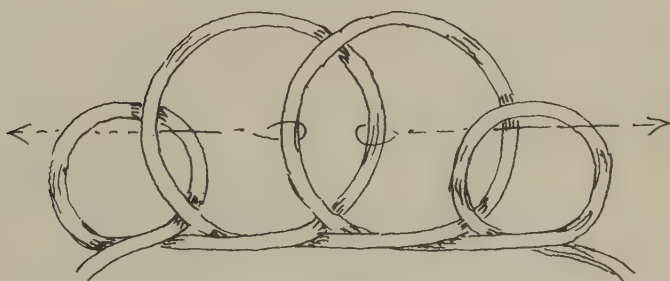


To show
the detail of the
centre
XY

the drawing
is in two parts
11-a & 11-b

CARRICK BEND
and
CHINESE DOUBLE BRAID
in combination
Fig. 1



TRICK KNOTSHandcuffSheepshankMan-of-War Sheepshank

A KNOT TIED WITH
ONE HAND

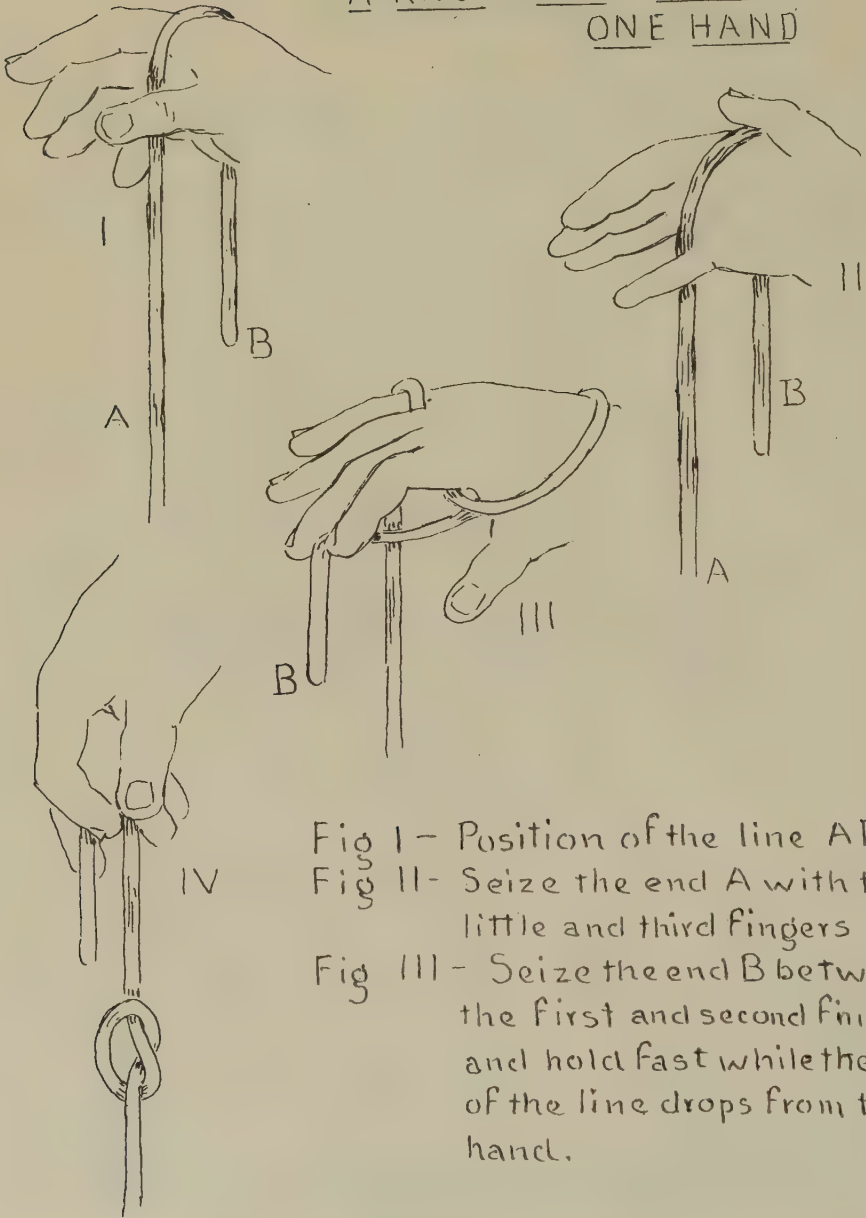


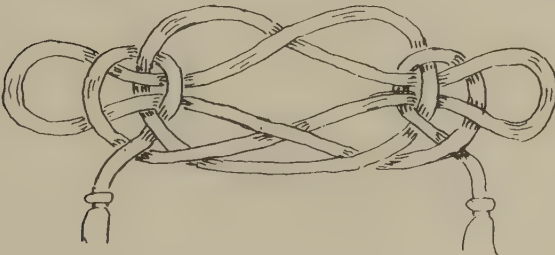
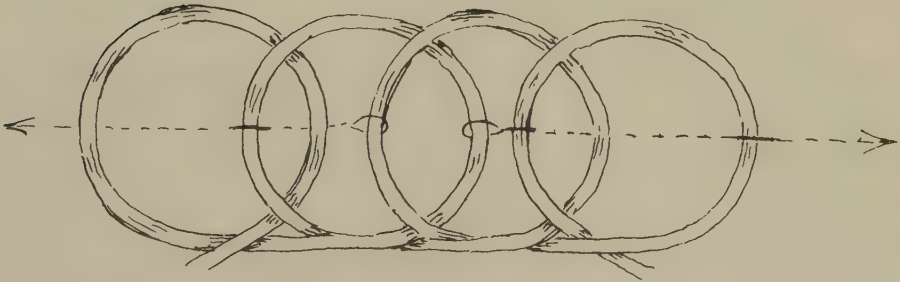
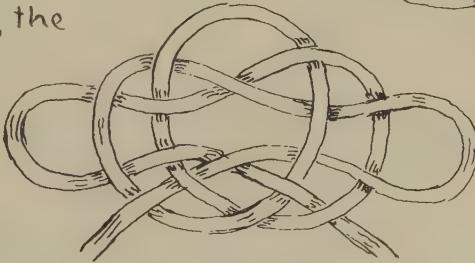
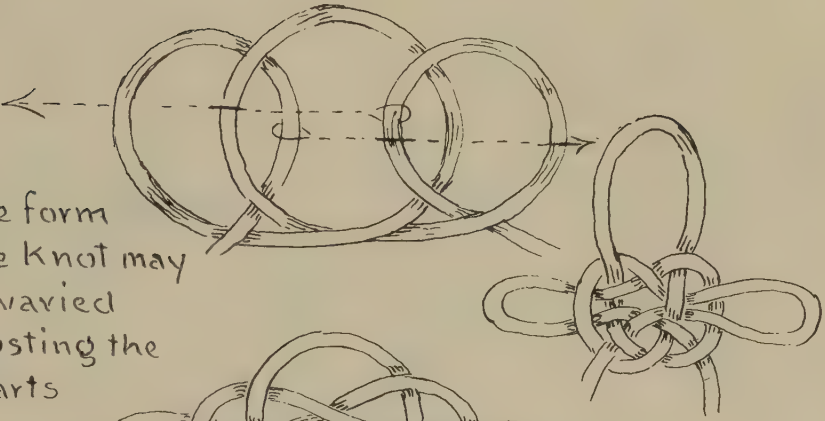
Fig I - Position of the line AB

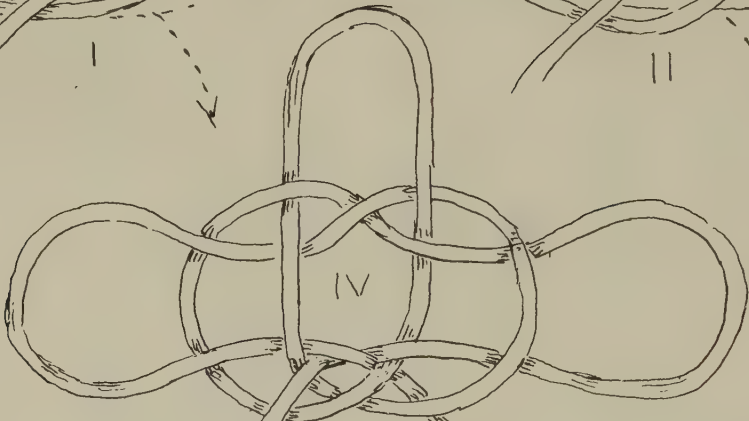
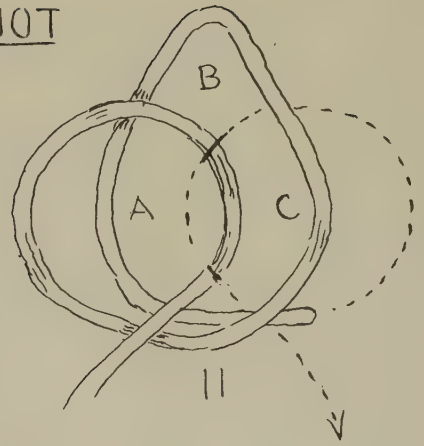
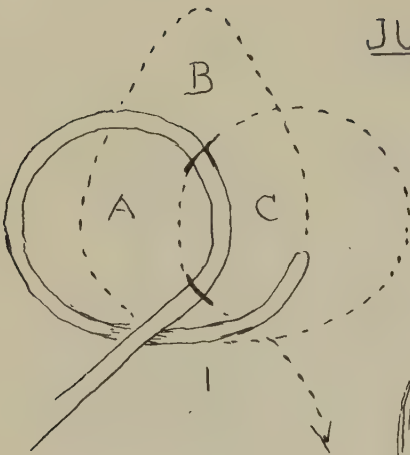
Fig II - Seize the end A with the little and third fingers

Fig III - Seize the end B between the first and second fingers and hold fast while the rest of the line drops from the hand.

TRICK KNOTS

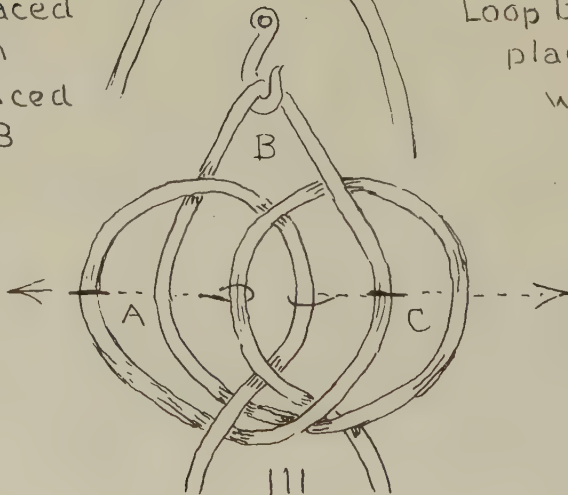
The form
of the knot may
be varied
by adjusting the
parts

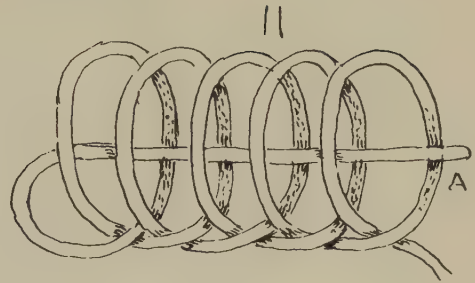
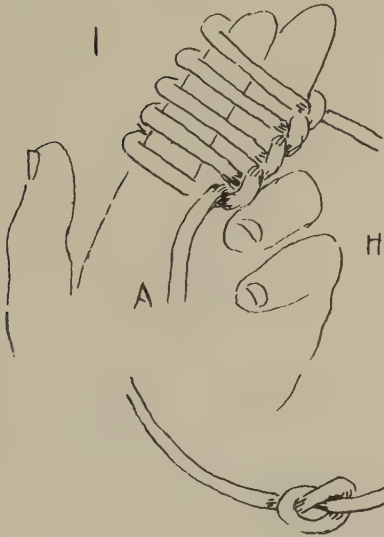


JURY KNOT

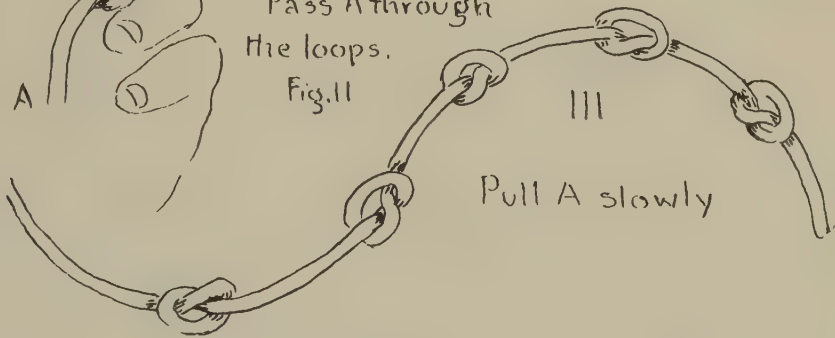
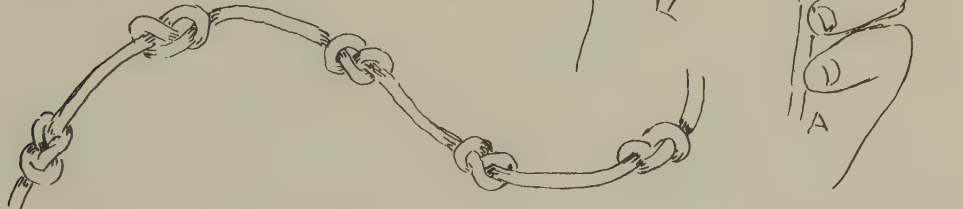
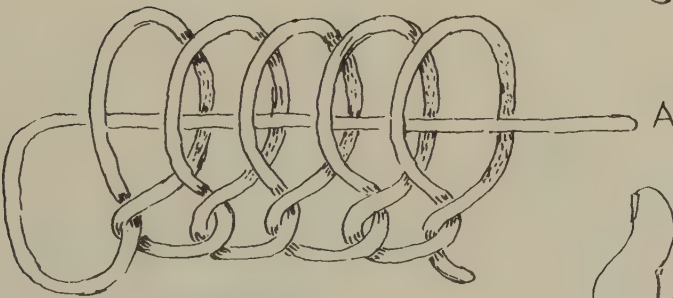
Loop B is placed
under loop A
Loop C is placed
under loop B
and over
loop A

Loop B is held in
place by a hook
while A & C
are pulled
into
position



TRICK KNOTSString of
Overhand Knots

Pass A through
the loops.
Fig. II

Figure of Eight
String



Adapted from the
German

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